

LINXX-2010

LINXX

LINXX-2010[®]
System Manual
Version 3.5.0



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INTRODUCTION

Welcome to LINXX-2010® version 3.5x! You are embarking on a new adventure in the world of Law Enforcement Network Communications. LINXX-2010 is the Windows-based software that allows your agency to communicate with the network more efficiently and with greater ease!

About This System Manual

The System Manual explains how to install, configure and maintain LINXX-2010. You are given step-by-step instructions and pictures of actual LINXX-2010 screens. Use this reference manual to learn LINXX-2010 commands and features.

As you read this manual you will see a few symbols and words that are printed differently. For example, words in **bold**, words in standard size ALL CAPITAL, and words in small ALL CAPITALS all mean something slightly different and are listed below. A symbol or a print style indicates something specific about the word or words around it. The keyboard and text reference sections explain these in detail.

Keyboard Reference

- All keyboard keys are shown in small capital letters. For example, CTRL, SHIFT, TAB, etc. When you read the instructions: “Press Esc,” press the (Escape) Esc key, do *not* type “E,” “S,” “C.”
- Arrow Keys refer to the UP, DOWN, LEFT and RIGHT ARROW keys.
- When you see two keys with a + sign between them, hold down the first key then press the second. For example: SHIFT+F1, means you *hold down* the SHIFT key then press F1 at the same time.

Text Reference

- A few words are **bold** simply so they will stand out for you to notice.
- File names and directories are shown in standard size ALL CAPITALS. For example: DMXTEDIT is a LINXX-2010 directory name.
- Menu items and commands begin with a capital letter. For example, File, Edit, Logs, Operator, Local, Clear Screen are examples of menu items.

About Windows

This section provides instructions on using the mouse, selecting menu items and completing dialog boxes. First you should look over the list of Windows® procedures below. If you are unsure of any of these procedures, please spend some time getting to know Windows better. The first several chapters of the Windows User's Guide give you enough basics to get started in LINXX-2010. The more proficient you are in Windows, the easier it is to utilize LINXX-2010 to its full potential.

Windows Basics

- Moving, minimizing, maximizing, activating, and closing windows.
- Choosing commands (from command menus) and completing dialog boxes.
- Clicking, double-clicking, and dragging with the mouse.
- Using the scroll bars, direction keys and navigation keys to move around in Windows.

Using the Mouse

This manual uses the term “mouse” to indicate a pointer. The mouse is a tool that is used for moving the cursor or pointer on the screen. Slide the mouse around on a flat surface or mouse pad to move the pointer on the screen. The best way to understand how the mouse works is to use it.



There are usually only two buttons (right and left) on the top of the mouse. Always use the *left* mouse button unless specifically told to use the *right*. If your mouse has three buttons, ignore the middle button when using LINXX-2010. The following terms and their meanings describe how this manual refers to the mouse.

When You See:

Using the Mouse:

Click on, or choose

Place the pointing arrow at the desired location, then press and quickly release the left button.

Double-click

Place the pointing arrow at the desired location, then quickly press and release the button twice.

Drag

Press and hold the button as you move the pointer.

Using Dialog Boxes

A dialog box is a standard Windows feature that provides information about program or system settings and allows you to change those settings. A dialog box may be presented when you choose a command. For example, in LINXX-2010, you search the Message Logs by completing the fields in the Message Log dialog box (see Figure 1.0).

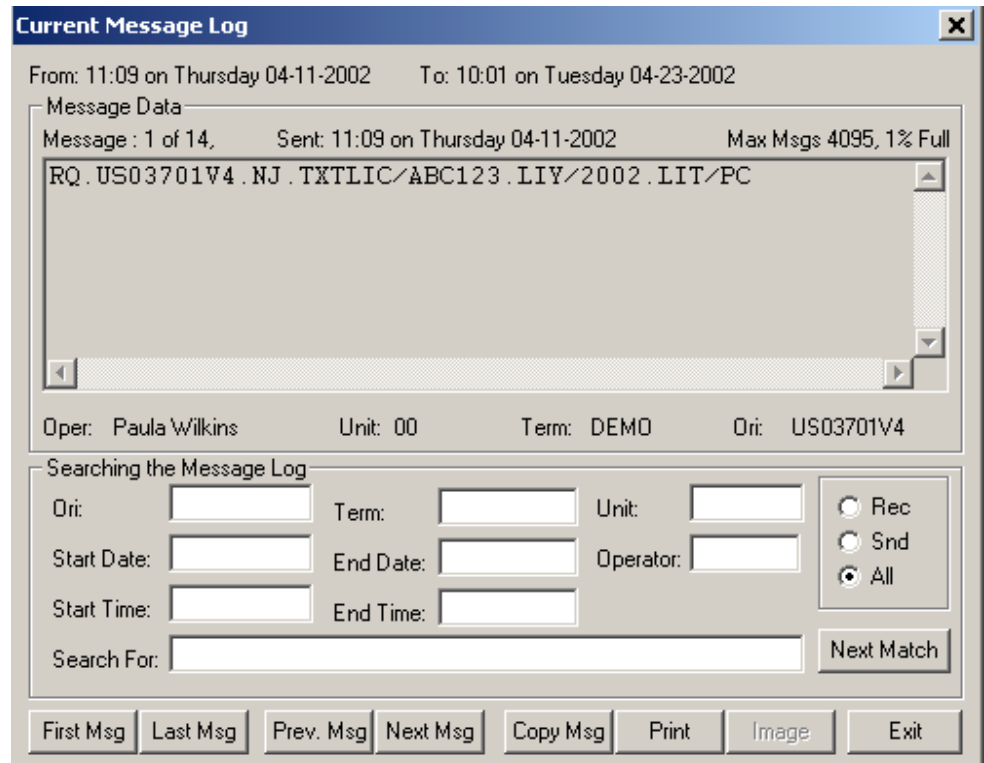


Figure 1.0 Message Log Dialog Box

To Navigate Through a Dialog Box

Use the TAB key to move forward through the fields and boxes in the dialog box.

Use SHIFT+TAB to move backwards through the fields and boxes.

CTRL+TAB moves the cursor to the first field in the previous group.

CTRL+HOME moves the cursor to the first field in the form.

CTRL+END moves the cursor to the last field in the form.

You can also use your mouse to point and click into any field.

To Close a Dialog Box Without Saving Changes

Click the **Cancel** command button, or double-click the control box in the upper left corner of the dialog box.

To Close a Dialog Box and Save Changes

Click the **OK** command button. In most cases the **OK** command is highlighted, so you can press **ENTER** to choose **OK**.

Types of Fields in a Dialog Box

Refer to Figure 1 for examples of the different fields listed below. Any fields not pictured in Figure 1 include figures of their own next to their respective descriptions.

Entry Boxes

Entry boxes allow you to enter data appropriate for the field. Make sure the cursor is in the box then type in the text or characters.

Check Boxes

Check boxes allow you to activate or deactivate a specific option. Put the mouse pointer in the box and click the left mouse button. This will check (activate) or uncheck (deactivate) the box.

Radio Buttons

Radio buttons usually appear in groups. You may select only one option in the group. Put the mouse pointer on the circle then click the left mouse button to select the option. To change the current setting, click another option in the group.

List Boxes

List boxes provide you with a list of possible entries for the field. Put the mouse pointer on the down arrow to the right of the box, then click the left mouse button. A list of possible entries drops down from the box. To select an item from the list, click on the item. The item you selected appears in the list box.

Command Buttons

Command buttons control the status of the entire dialog box. Put the mouse pointer on the face of the command and click on the left mouse button, or **TAB** through the commands until the one you want is highlighted, then press **ENTER**.

1 INSTALLING LINXX-2010

This chapter explains the first three phases of installation. The next three phases (listed below) are explained in Chapter 2 “*Communications Task Setup*” and Chapter 3 “*User Interface Setup*”. After you complete the installation procedures in this chapter you should continue to Chapter 2, then Chapter 3 of this manual to complete the installation.

There are six phases in the LINXX-2010 installation process:

1. Installing the interface card (if required)
2. Attaching the network and printer cables
3. Installing the LINXX-2010 software
4. Setting the Communications Task parameters
5. Setting the User Interface parameters
6. Rebooting the system

To operate LINXX-2010 you should ensure that your system meets the minimum specifications listed below.

Minimum Hardware and Software Specifications

Computer	486DX66
RAM	8MB
Monitor	14” VGA 256 Color
Disk	150 MB with 15 ms average access
Diskette Drive	3.5”, 1.44 MB
Keyboard	101 key enhanced
Pointer	Mouse or trackball
Printer	Dot matrix printer for character-based printing
Software	Windows 95/98/NT

Interface Card Classification and Configuration

LINXX-2010 may be supplied with one of three different interface cards, depending on your type of system. It is important to identify the type of card that is being installed and the hardware resources that it uses. The resources used include the Base Address of the card and the Interrupt level. To identify the type of card you are installing, please reference Figures 1.1, 1.2, and 1.3.

Enhanced 8530 Card (Legacy)

Description

The Legacy Enhanced 8530 card is depicted in Figure 1.1; it is an older, larger card (4.5 in. x 8 in.) as compared to the smaller (4 in. x 6 in.) Enhanced 8530 card (see Figure 1-2). This single-user card has selectable Interrupts 2, 3, 4, 5, 7, 9, 10, 11, and 12, and can be selected to occupy the Base Addresses of 3F8, 2F0, 2F8, 3E0, 2E0, or 2E8. There are jumpers on this card with indicators that permit the settings to be constructed. These settings must match those defined in the Communications Task configuration, under *General System Options*. If the main port is used for serial communications, the default is IRQ 5 at Address 3E0. If the main port is not used for serial communications, the default is Address 3E0, with no IRQ jumper set. It is recommended to keep these default settings unless hardware conflicts arise.

Setting Jumpers

Two sets of jumpers may be configured by the user to control the settings on the card: **Base Address** and the **Interrupt Request lines**. All other jumper settings should be left at the defaults.

The *Interrupt Request lines* are defined by an eight-post jumper (indicated by JP7 in Figure 1.1) on the Legacy Enhanced 8530 card. Each setting is numbered, with the possible settings being 2, 3, 4, 5, 7, 9, 10, 11, and 12. To select an Interrupt setting, place the jumper over the posts to close the contacts denoted by the Interrupt jumper. The Datamaxx software will only allow an Interrupt line of 3, 4, 5, and 7 to be set.

The Base Address is defined by a five-post jumper (indicated by JP5 in Figure 1.1). This jumper set has four settings for the Base Address and one for a single setting that changes the last digit of the Address. The four settings are 3FX, 2FX, 3EX, and 2EX. Each is clearly marked by its corresponding jumper. The last digit (X) is controlled by the jumper post labelled 0/8. If this jumper is closed, the last digit will be an 8, thus making the Address choices 3F8, 2F8, 3E8, and 2E8. If this last jumper is open, the last digit will be 0, thus making the Address choices 2F0, 3E0, and 2E0. Note that, theoretically, a Base Address of 3F0 can be defined. This choice must not be used as it will conflict with other settings in the system, notably the diskette drive interface. The LINXX-2010® and LINXX-2020® software will not allow this value to be defined.

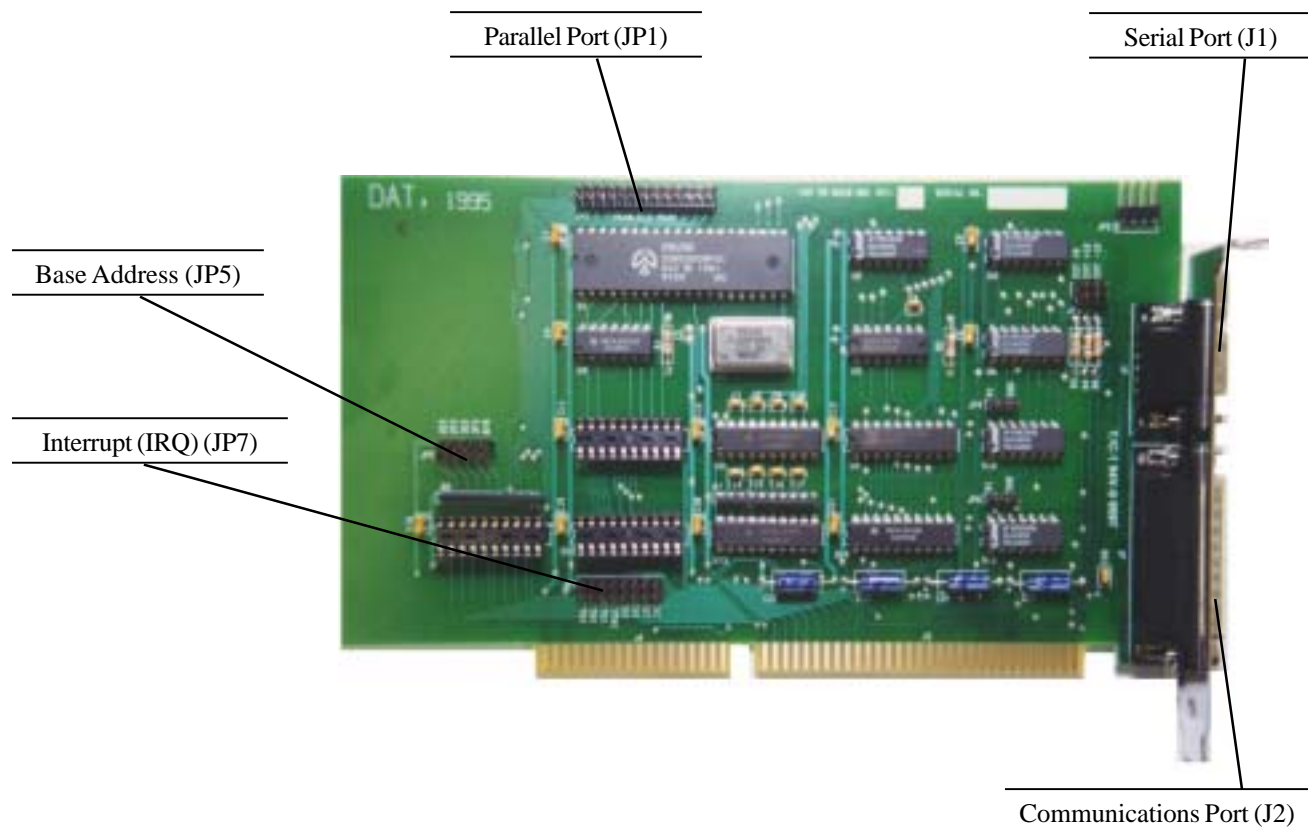


Figure 1.1 Legacy Enhanced 8530 Card

Enhanced 8530 Card

Description

The Enhanced 8530 card is depicted in Figure 1.2. This card differs from the Legacy Enhanced 8530 card in that the dimensions of the Legacy Enhanced 8530 card are larger (4.5 in. x 8 in.) than those of the Enhanced 8530 card (4 in. x 6 in.). Additionally, in place of the communications port (illustrated in Figure 1.1), the Enhanced 8530 card has a parallel port used to attach a parallel printer. Agencies that use this card utilize a separate network interface card (NIC) for communications purposes; this is often the case when the communications protocol is TCP/IP. This single-user card has selectable Interrupts 2, 3, 4, 5, 7, 9, 10, 11, and 12, and can be selected to occupy the Base Addresses of 3F8, 2F0, 2F8, 3E0, 2E0, or 2E8. There are jumpers on the card with indicators that permit the settings to be constructed. These settings must match those defined in the Communications Task configuration, under *General System Options*. Because the main port is not used for serial communications, the default is Address 3E0, with no IRQ jumper set. It is recommended to keep these default settings unless hardware conflicts arise.

Jumper Settings

Two sets of jumpers may be configured by the user to control the settings on this card: **Base Address** and the **Interrupt Request lines**. All other jumper settings should be left at the defaults.

The *Interrupt Request lines* are defined by an eight-post jumper (indicated by JP7 in Figure 1.2) on the Enhanced 8530 card. Each setting is numbered, with the possible settings being 2, 3, 4, 5, 7, 9, 10, 11, and 12. To select an Interrupt setting, place the jumper over the posts to close the contacts denoted by the Interrupt jumper. The Datamaxx software will only allow an Interrupt line of 3, 4, 5, and 7 to be set.

The *Base Address* is defined by a five-post jumper (indicated by JP5 in Figure 1.2). This jumper set has four settings for the Base Address and one for a single setting that changes the last digit of the Address. The four settings are 3FX, 2FX, 3EX, and 2EX. Each is clearly marked by its corresponding jumper. The last digit (X) is controlled by the jumper post labelled 0/8. If this jumper is closed, the last digit will be an 8, thus making the Address choices 3F8, 2F8, 3E8, and 2E8. If this last jumper is open, the last digit will be 0, thus making the Address choices 2F0, 3E0, and 2E0. Note that theoretically a Base Address of 3F0 can be defined. This choice must not be used as it will conflict with other settings in the system, notably the diskette drive interface. The LINXX-2010® and LINXX-2020® software will not allow this value to be defined.

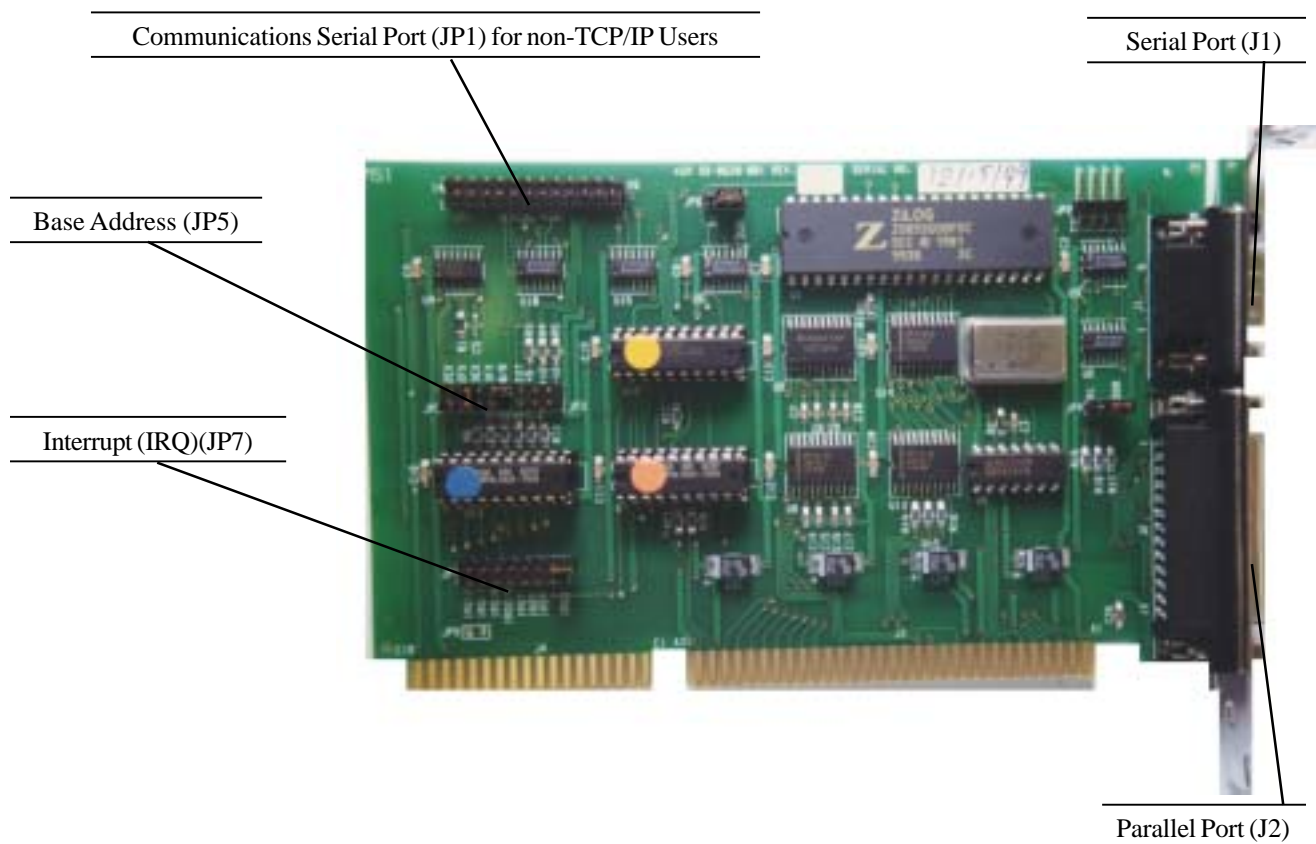


Figure 1.2 Enhanced 8530 card

Gateway Co-Processor Card

Description

The Gateway Co-processor card is most commonly installed in the PC that will be used for the communications gateway in a LAN environment, though it may be used in some custom single-user configurations. The Gateway card also will be installed in the PC that acts as the communications server (which may also be a file server, depending on the LAN configuration).

Jumper Settings

The Gateway card is distinguished from other cards as it has its own processor and memory on the card. It may or may not use Interrupts depending on the software configuration. The Base Address may be set to 240, 280, 2C0, 300, or 340. The default is 280 which operates in most systems without conflict. This Address is set by jumpers within the card itself and the location of the jumpers is labeled as JP8 in Figure 1.3. Reading from left to right from jumper JP8, the Base Address selections are as follows:

- Position 1 - 380
- Position 2 - 340
- Position 3 - 300
- Position 4 - 2C0
- Position 5 - 280 (default)
- Position 6 - 240
- Position 7 - 200

The default Interrupt line is not set (i.e. none). The location of the jumpers is labeled as JP9 in Figure 1.3. Reading from left to right from jumper JP9, the Interrupt line selections are as follows:

- Position 1 - IRQ-1
- Position 2 - IRQ-2
- Position 3 - IRQ-3
- Position 4 - IRQ-4
- Position 5 - IRQ-5
- Position 6 - IRQ-6

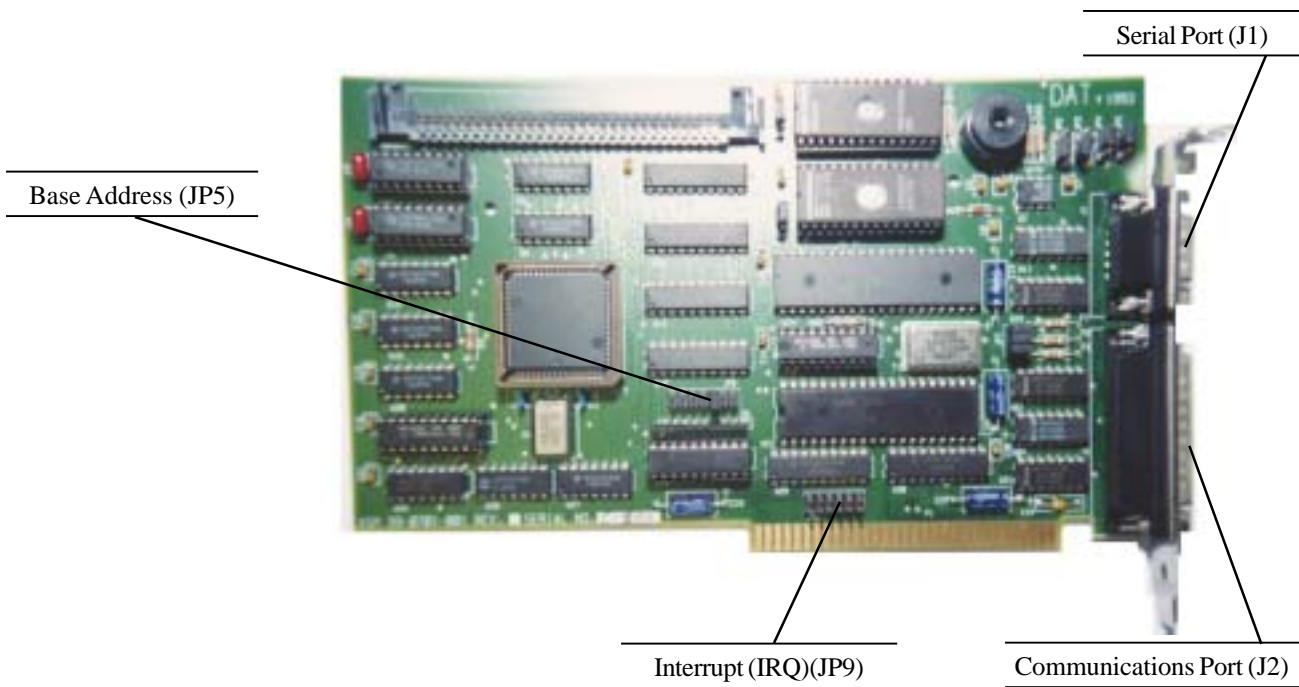


Figure 1.3 Gateway Co-Processor Interface Card

Additional Configuration Jumper Settings

The following are additional jumper settings for the Datamaxx Gateway co-processor interface card. The user is cautioned to maintain these settings at the factory defaults to ensure proper operation of the Datamaxx software. Figure 1.4 shows the location of each jumper. They are clearly marked on the board itself.

JP1- PROM/EEPROM Select

- *Upper Position* - PROM (default)
- *Lower Position* - EEPROM

JP2 - Transmit Clock Master/Slave Select

- *Upper Position* - Master
- *Lower Position* - Slave (default)

JP3 - Receive Clock Master/Slave Select

- *Upper Position* - Master
- *Lower Position* - Slave (default)

JP4 - Main Port Data Set Ready/Ring Indicator Select

- *Upper Position* - Data Set Ready (default)
- *Lower Position* - Ring Indicator

JP5 - Auxiliary Data Set Ready/Ring Indicator Select

- *Upper Position* - Data Set Ready (default)
- *Lower Position* - Ring Indicator

JP6 - ROM Size Select

- *Upper Position* - 256K bytes (default)
- *Lower Position* - 512K bytes

JP7 - External Voltages Enable

None of these jumpers are closed in the default settings.

- *Upper Position* - Plus 5 volts on Pin 23
- *Middle Position* - Plus 12 volts on Pin 24
- *Lower Position* - Minus 12 volts on Pin 25

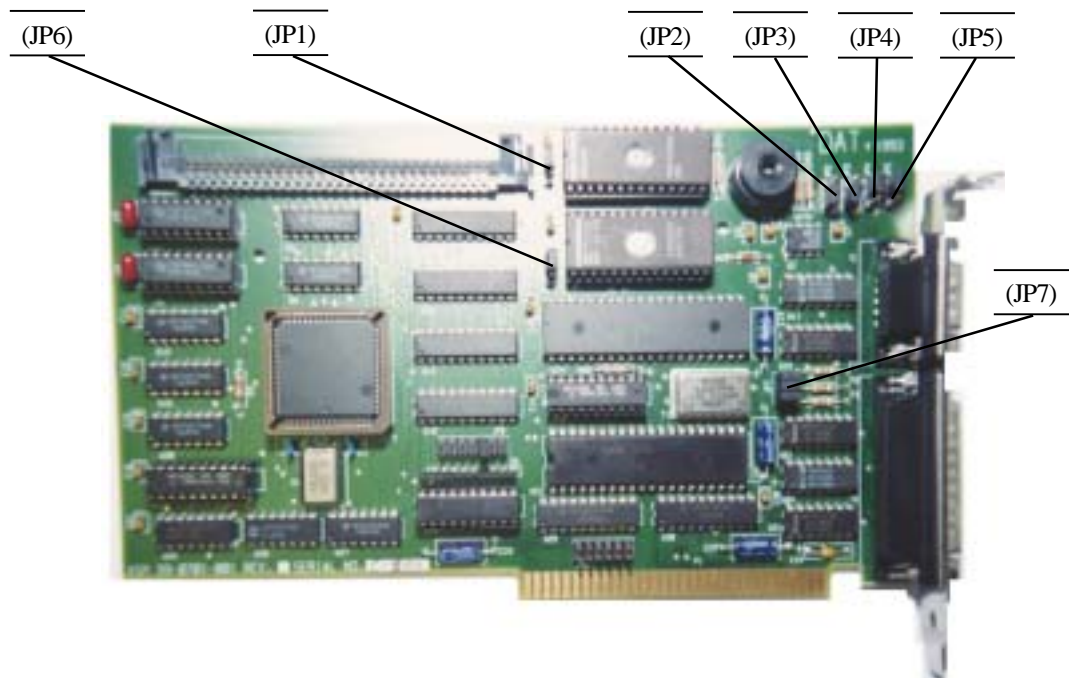


Figure 1.4 Additional Gatecard Jumper Settings

Card Installation

To install the Legacy Enhanced 8530, Enhanced 8530 and Gateway interface cards:

1. Turn off and unplug the computer. Unplug any cables that may disrupt the process during the installation.

2. Remove the computer's cover (reference the computer's owner manual). Ensure that you are properly grounded to avoid damaging the equipment with static electricity.
3. Remove an available slot cover and save the screws.
4. Carefully set the interface card's metal tongue into the groove. Lightly "rock" the card from end to end with even pressure until it is seated, or snaps into place. The top of the card should be level.
5. Fasten the metal bracket on the interface card to the computer case with the screws from the slot cover. Anchor the card securely.
6. Replace the computer cover, plug in the computer and reconnect any cables that were removed.
7. The Gatecard is equipped with a small speaker that will beep after power is restored indicating proper installation.

Attaching the Network and Printer Cables

Appropriate cables are supplied with the card. Depending on your setup, you may receive either one or two cables: a 173 serial cable (if requested for a serial printer), a parallel printer cable, and/or a 001 serial modem cable for communications. The Gatecard will not be bundled with a parallel cable.

If the communications protocol is TCP/IP, then there will be a separate network interface card (NIC) for the communications port. Additionally, the DB-25 connector may have been set as a serial port for a serial printer.

In the IBM, SNA or APPC environments, use the modem connection supplied by the IBM interface. Do not connect to the DB-25 connector on the interface card; connect only the serial printer to the DB-9 connector on the interface card.

NOTE: **Serial** ports are "male" ports; they have an array of pins. **Parallel** ports are "female" ports; they have an array of pin holes.

Legacy Enhanced 8530 Card

If you have a serial printer, use the thinner 173 cable to connect the serial printer to the DB-9 connector (serial port) on the interface card.

Use the thicker 001 serial modem cable to connect the modem to the DB-25 connector (communications port) on the interface card.

Enhanced 8530 Card

The **Enhanced 8530** card has no communications port. Communications are via a separate NIC card using the TCP/IP protocol.

If you have a *serial* printer, use the 173 cable to connect the serial printer to the DB-9 connector (serial port) on the interface card.

If you have a *parallel* printer, use the parallel cable to connect the parallel printer to the DB-25 connector (parallel port) on the interface card.

Gateway Card

If you have a serial printer, use the thinner 173 cable to connect the serial printer to the DB-9 connector (serial port) on the interface card.

Use the thicker 001 modem cable to connect the modem to the DB-25 connector (communications port) on the interface card.

Cable Configurations

The interface card has a 25-pin male adapter for the main port (communications or parallel printer, depending on configuration) and a 9-pin male adapter for the auxiliary (serial printer) port. If the Enhanced 8530 card is configured for a parallel printer to be plugged into the 25-pin main port, then the following pinouts do not apply to the main port of the card.

The main port has standard pinouts. The cable from the network attaches directly to the interface, if the card is configured with a communications port. Otherwise, the network cable attaches to a separate network interface card.

The auxiliary (serial printer) port uses a 9-pin male connector. An adapter is available to allow existing 25-pin printer cables to attach to the 9-pin connector. This is known as the “DB-9 to DB-25 Pin.” It is available from Datamaxx or may be obtained at any computer supply store. It is a standard DB-9 to DB-25 pin female-to-male adapter (sometimes referred to as an “AT Serial Port Adapter”). Also available from Datamaxx are standard printer cables for connecting printers.

The pinout designations for each port are shown in the list below.

Main Port (25-Pin Male Connector)

<i>Pin Number</i>	<i>Direction</i>	<i>Name</i>
1	----	Chassis Ground
2	O	Transmitted Data to Network
3	I	Received Data to Network
4	O	Request to Send to Network
5	I	Clear to Send to Network
6	I	Data Set Ready from Network
7	----	Signal Ground
8	I	Carrier Detect from Network
15	I	Receive Data Clock from Network
17	I	Transmit Data Clock from Network
20	O	Data Terminal Ready to Network

Printer Port (9-Pin Male Connector)

<i>Pin Number</i>	<i>Direction</i>	<i>Name</i>
1	I	Carrier Detection from Printer
3	O	Transmit Data to Printer
4	O	Data Terminal Ready to Printer
5	----	Signal Ground
6	I	Data Set Ready from Printer
8	I	Clear to Send from Printer

Software Installation and Setting System Options

Once the interface card is installed and the cables are connected, you are ready to install the software from the LINXX-2010® CD-ROM.

The steps listed below describe the procedures for installing the software and configuring system options.

Verify system requirements for operating LINXX-2010 (reference Chapter 1 - *Installing LINXX-2010*”).

1. Install the LINXX-2010 software.
2. Review the default settings in the Communications Task Setup program (see Chapter 2 “*Communications Task Setup*”).

3. Review the default settings in the User Interface Setup program (see Chapter 3 - *User Interface Setup*).
4. Invoke system security for LINXX-2010 (see Chapter 4 “*Extended Security Setup*”).

Installing to a Windows 95 or Windows NT Workstation

1. Turn on your computer and start Windows, making sure all programs and applications are closed.
2. Insert the LINXX-2010® CD-ROM into the CD drive.
3. Click the **Start** button, then click the **Run** command (see Figure 1.5).

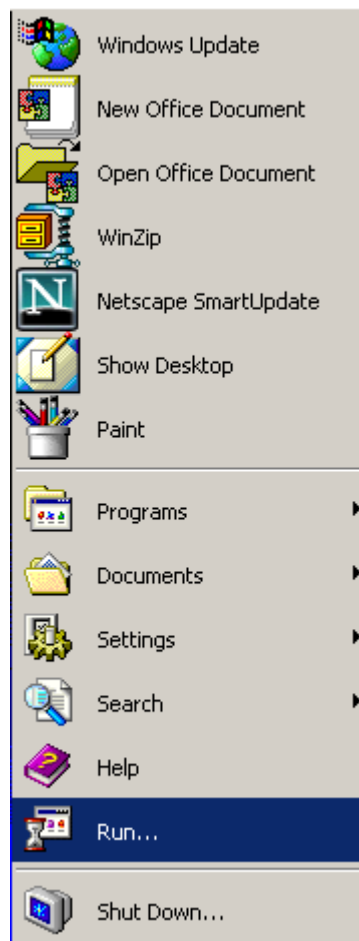


Figure 1.5 Start Menu

4. Type **e:\setup** in the **Open** field and click on **OK** (see Figure 1.6). The letter “e” in the command is the letter of the CD drive in which you inserted the CD-ROM. If your CD drive is a letter other than “e,” type that letter followed by **:\setup**.

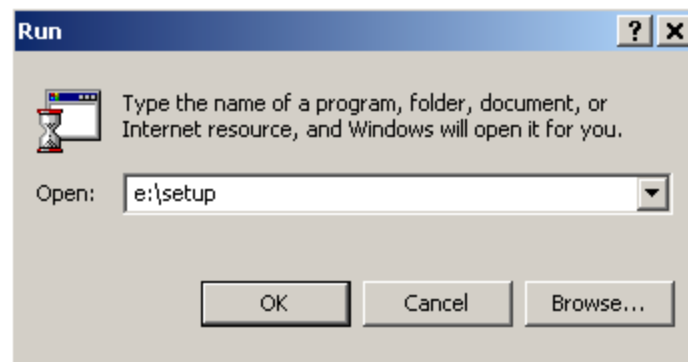


Figure 1.6 Run Command

Datamaxx Applications

CommTASK Installation

5. Once the CD is inserted into your CD driver, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.7). The user may select the application to begin installation by clicking an item in the **Datamaxx Applications** list.



Figure 1.7 Datamaxx Installation Menu

6. The installation program Wise Installation Wizard begins its initialization. This first dialog box describes which version of CommTASK will be installed.



Figure 1.8 Wise Installation Wizard Initialization Dialog Box

7. The installation program begins and you are prompted with the **Welcome to CommTASK Setup Program** dialog box.

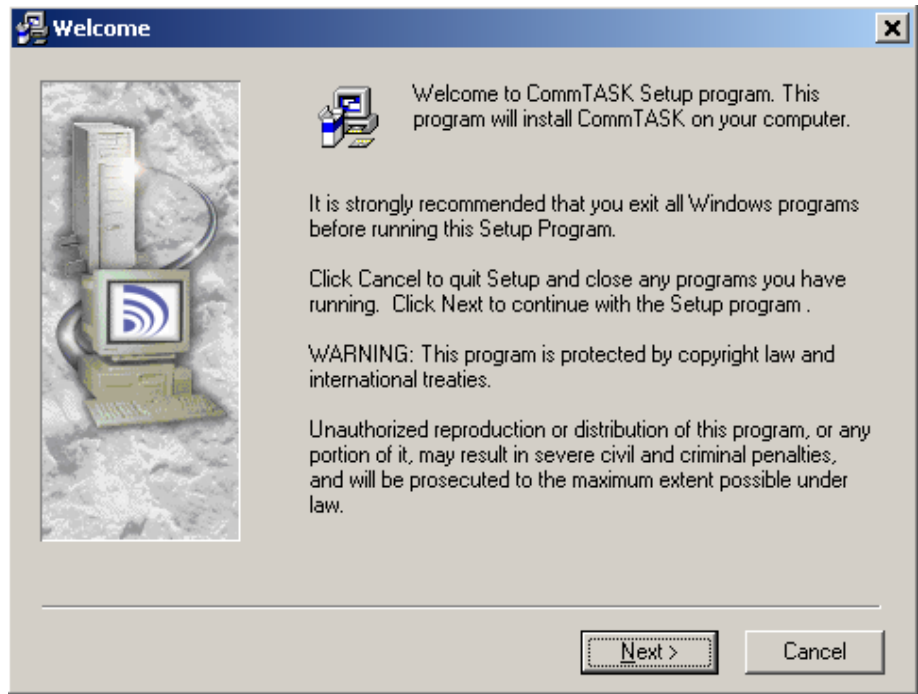


Figure 1.9 Welcome to CommTASK Setup Program Dialog Box

Click the **Next** button to continue, or click **Cancel** to abort the installation process.

8. If the installation process detects that CommTASK is already connected, it will display the following warning.

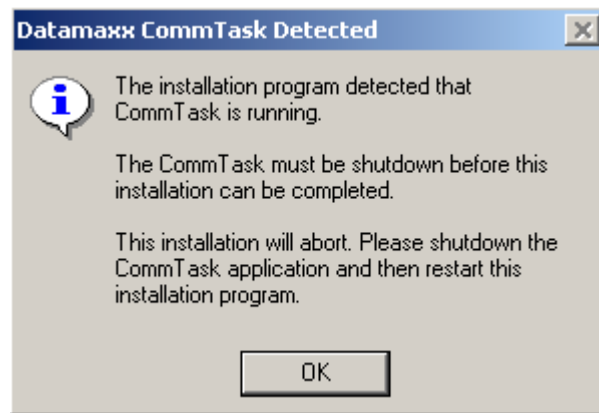


Figure 1.10 Datamaxx CommTASK Detected

Click the **OK** button, then double-click the CommTASK application icon. Disconnect the CommTASK connection by selecting the **File** menu, then click **Exit**.

9. Next, the **Printer Configuration** dialog box is displayed providing the user with instructions regarding the CommTASK application.

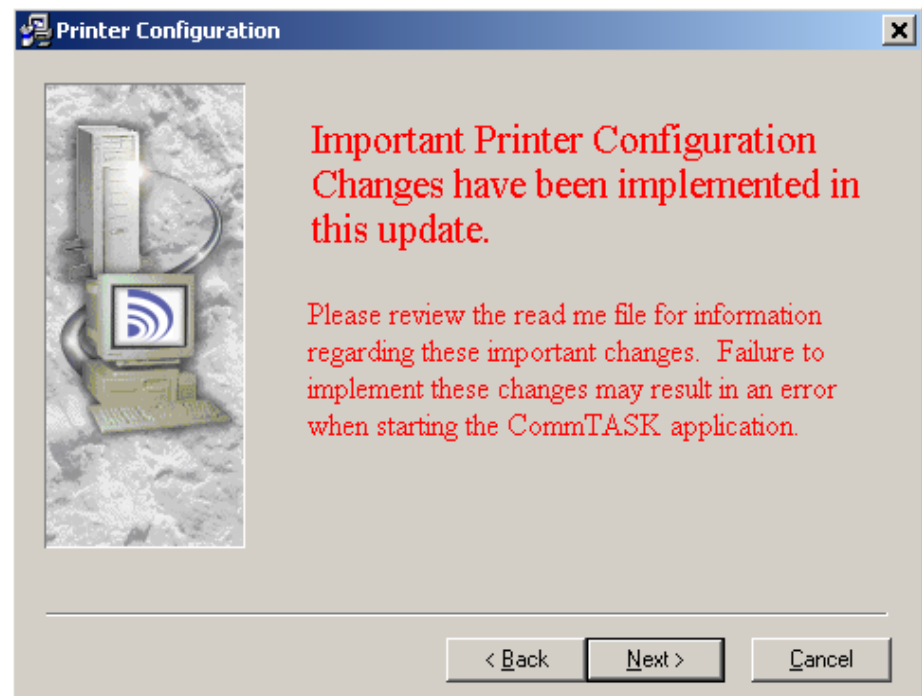


Figure 1.11 Printer Configuration Dialog Box

Click **Next** to continue, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

10. The system administrator may enter the user name of a person, or the name of the agency using the application in the **Registration Information** dialog box.

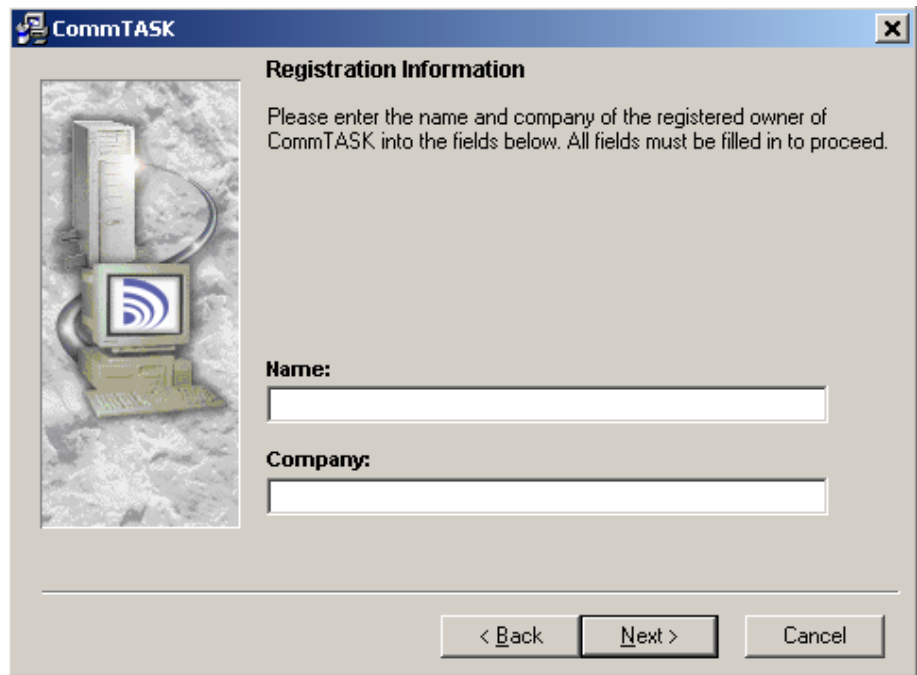


Figure 1.12 Registration Information Dialog Box

11. The **Select Components** dialog box allows the user to choose which option to install. A user may select from a full installation or an upgrade to an already existing application.



Figure 1.13 Select Components Dialog Box

CommTASK Full Installation

- Next, the **Choose Destination Location** dialog box is displayed and the user may accept the designated folder to contain the CommTASK system files, or create a new folder.

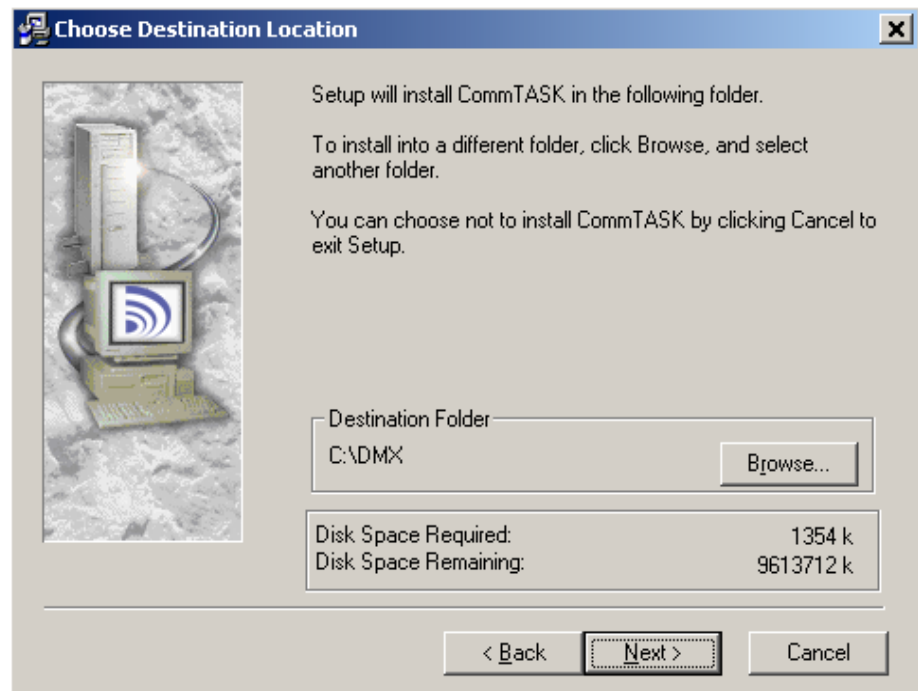


Figure 1.14 Choose Destination Location Dialog Box

Datamaxx recommends that you allow CommTASK to load to the drive designated in the *Destination Folder* section by clicking the **Next** button. However, if you wish to load CommTASK to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

13. In the **Backup Replaced Files** dialog box, the user may choose to backup copies of replaced files. If **Yes** is selected, the user may designate the directory for the backup files or use the default directory.

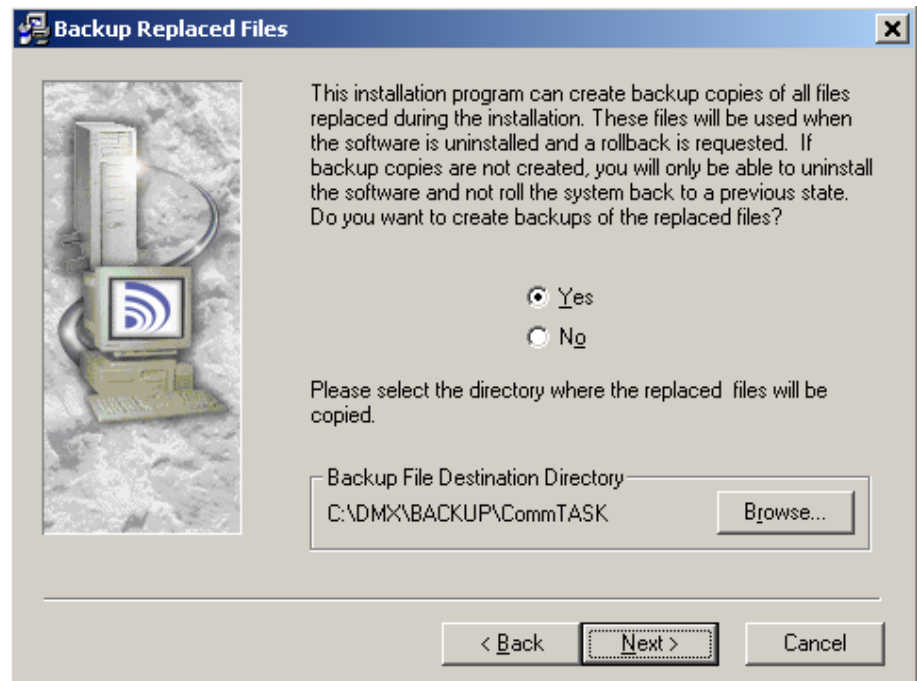


Figure 1.15 Backup Replaced Files Dialog Box

Datamaxx recommends that you allow CommTASK to backup the replacement files to the drive designated in the *Backup File Destination Directory* section by clicking the **Next** button. However, if you wish to load the backup replacement files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process.

14. If **No** is selected in the **Backup Replaced Files** dialog box, the user may not designate the directory for the backup files. Note the **Browse** button is grayed-out (not activated).

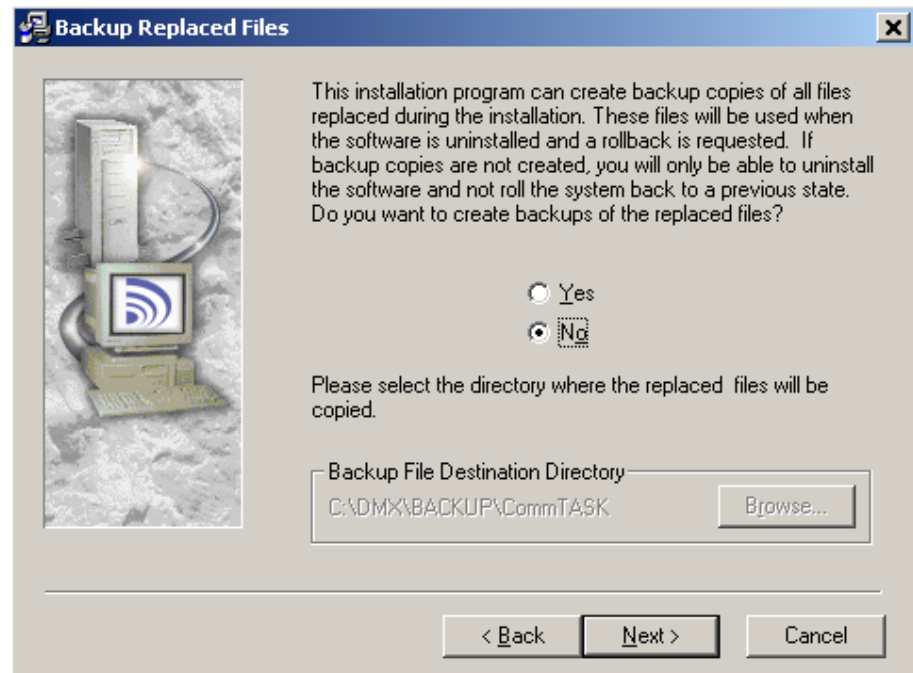


Figure 1.16 Backup Replaced Files Dialog Box

Click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

15. The **Start Installation** dialog box prompts the user to click the **Next** button to begin the installation of CommTASK.

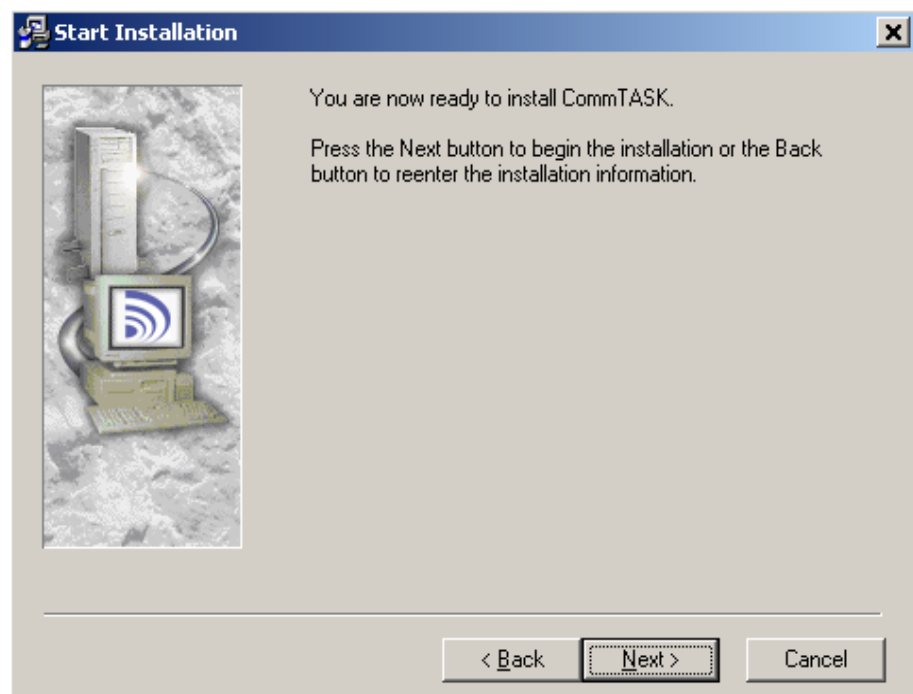


Figure 1.17 Start Installation Dialog Box

16. The **Installing** information box provides the user with a progress meter. The user may click the **Cancel** button to abort the installation process.

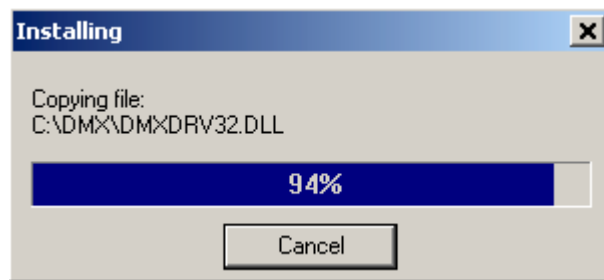


Figure 1.18 Installing Progress Meter

17. Next, the **Allow CommTASK to auto-start?** dialog box provides you with the option to automatically start CommTASK when you logon to your desktop.

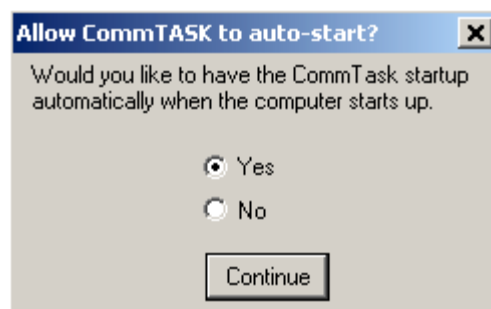


Figure 1.19 Allow CommTASK to Auto-start Dialog Box

18. The **Installation Complete** dialog box prompts the user to click the **Finish** button to complete the installation of CommTASK.

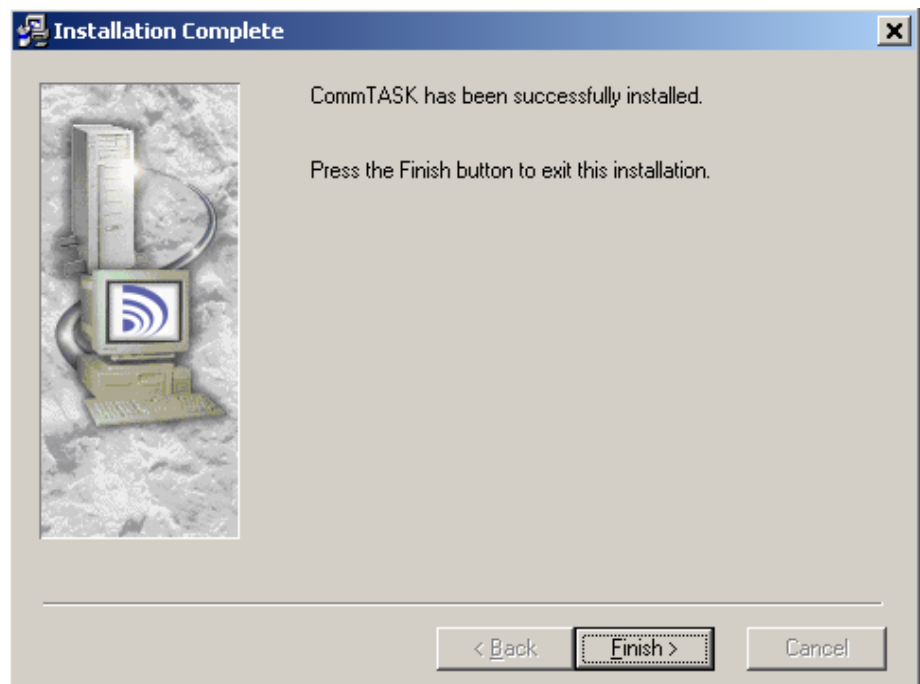


Figure 1.20 Installation Complete Dialog Box

19. Once the installation of CommTASK is complete, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.21). The user may select the application to begin installation of another menu item by clicking that item in the **Datamaxx Applications** list.



Figure 1.21 Datamaxx Installation Menu

CommTASK Upgrade Installation

20. To begin the installation of the CommTASK upgrade, follow steps 6-10 in the *CommTASK Full Installation* section. The **Select Components** dialog box allows the user to choose the Upgrade option for CommTASK.

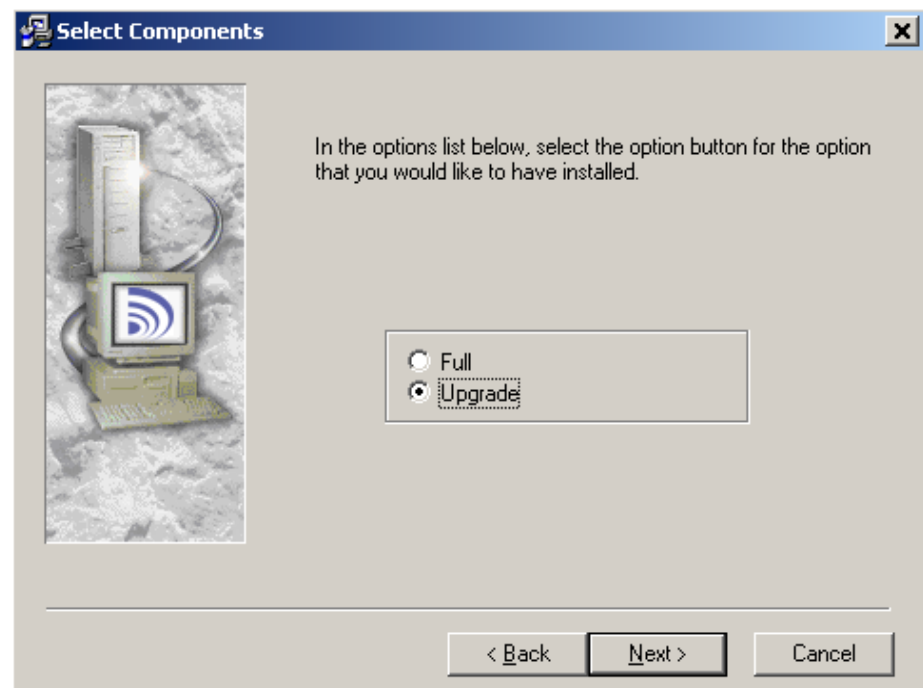


Figure 1.22 Select Components Dialog Box

21. Next, the **Choose Destination Location** dialog box is displayed and the user may accept the designated folder to contain the CommTASK system upgrade files, or create a new folder.

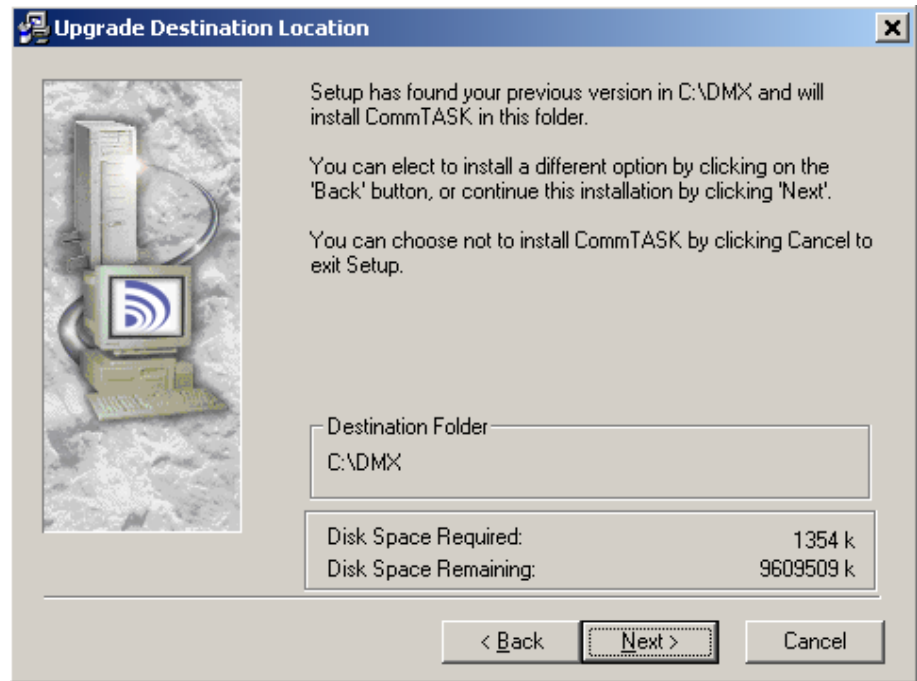


Figure 1.23 Choose Destination Location Dialog Box

Datamaxx recommends that you allow CommTASK to load to the drive designated in the *Destination Folder* section by clicking the **Next** button. However, if you wish to load the CommTASK upgrade files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

22. In the **Backup Replaced Files** dialog box, the user may choose to backup copies of replaced files. If **Yes** is selected, the user may designate the directory for the backup files or use the default directory.

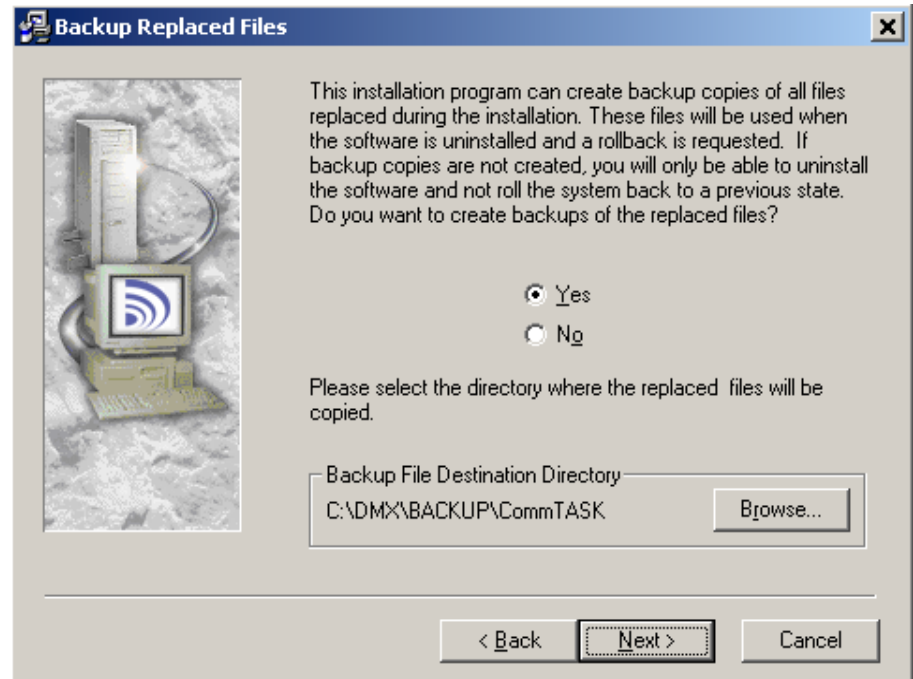


Figure 1.24 Backup Replaced Files Dialog Box

Datamaxx recommends that you allow CommTASK to backup the replacement files to the drive designated in the *Backup File Destination Directory* section by clicking the **Next** button. However, if you wish to load the backup replacement files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box. Select the correct radio button, then click **Next** to continue.

23. If **No** is selected in the **Backup Replaced Files** dialog box, the user may not designate the directory for the backup files. Note the **Browse** button is grayed-out (not activated).

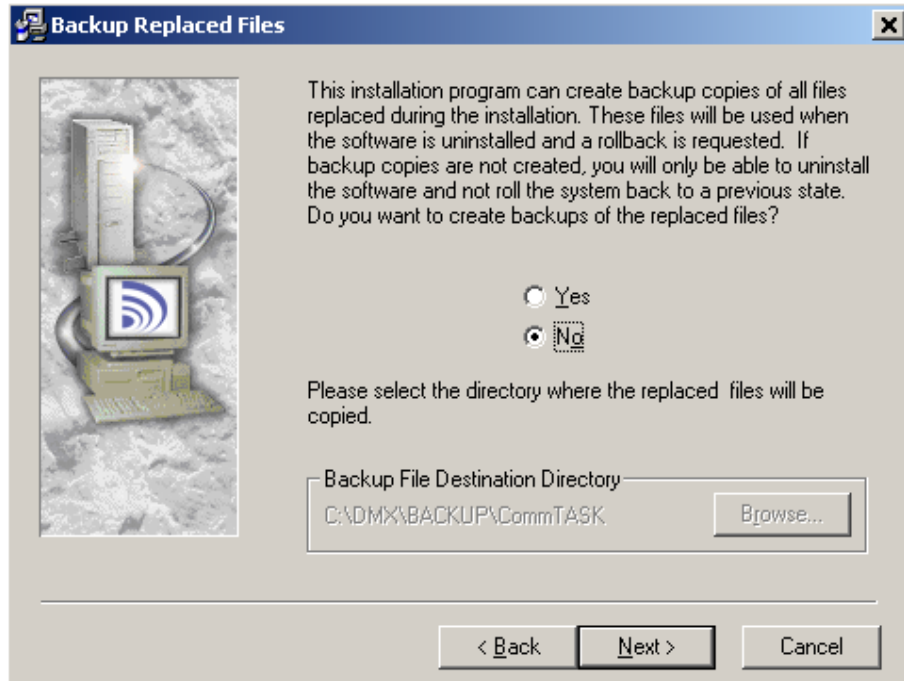


Figure 1.25 Backup Replaced Files Dialog Box

Click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

24. The **Start Installation** dialog box prompts the user to click the **Next** button to begin the upgraded installation of CommTASK.

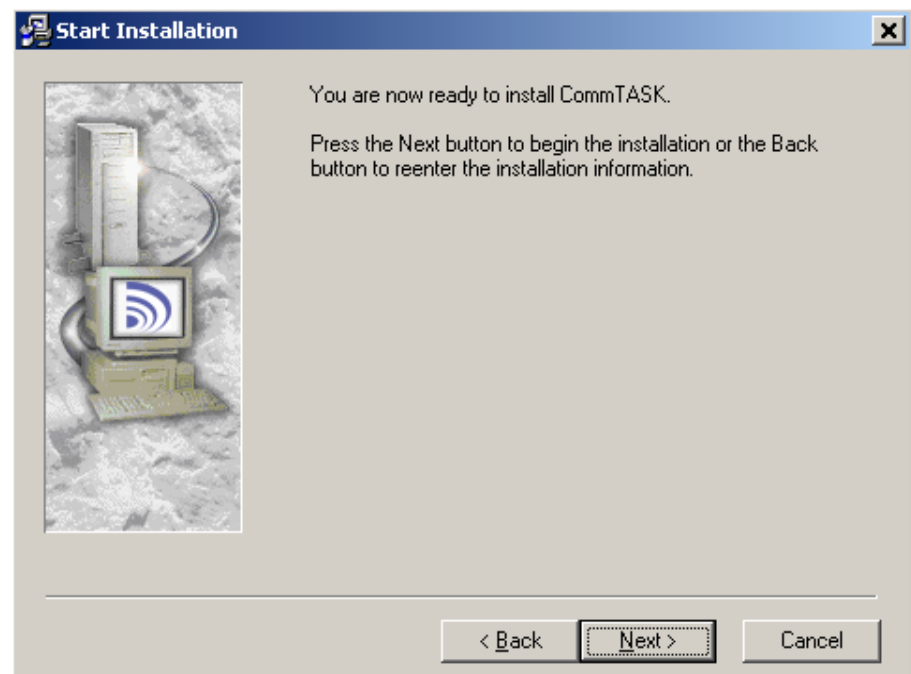


Figure 1.26 Start Upgrade Installation Dialog Box

25. The **Installing** information box provides the user with a progress meter. The user may click the **Cancel** button to abort the upgrade installation process.

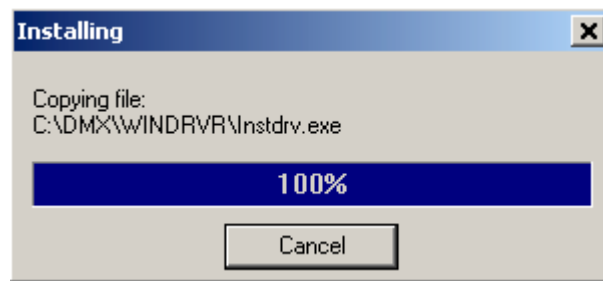


Figure 1.27 Installing Progress Meter

26. Next, the **Allow CommTASK to auto-start?** dialog box provides you with the option to automatically start CommTASK when you logon to your desktop.

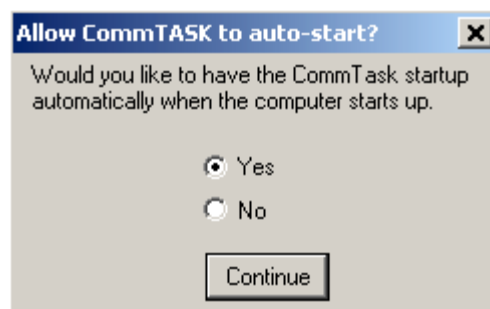


Figure 1.28 Allow CommTASK to Auto-start Dialog Box

27. The **Installation Complete** dialog box prompts the user to click the **Finish** button to complete the upgrade installation of CommTASK.

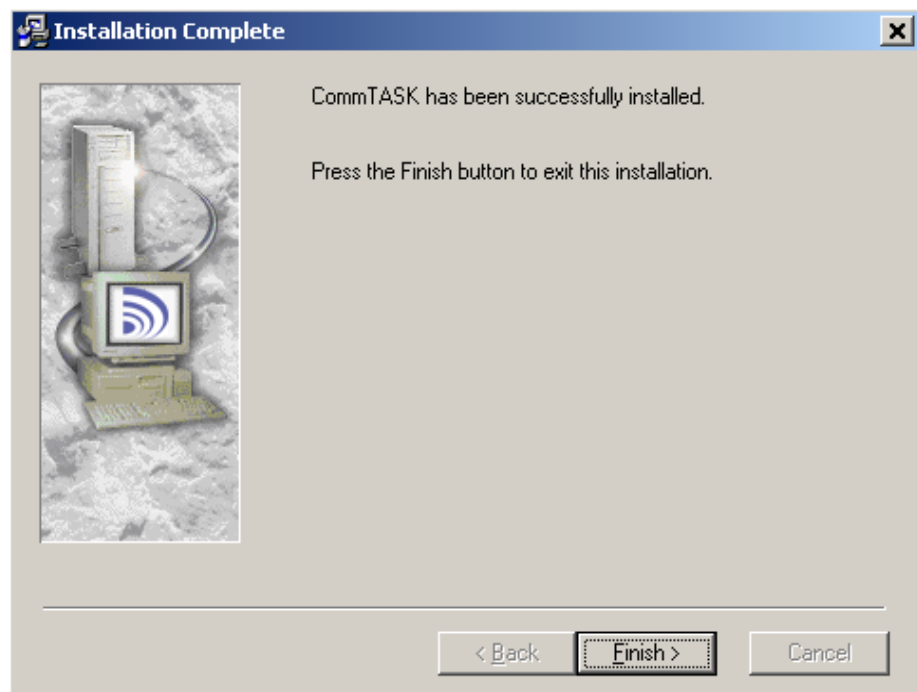


Figure 1.29 Installation Upgrade Complete Dialog Box

28. Once the upgrade installation of CommTASK is complete, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.30). The user may select the application to begin installation of another menu item by clicking that item in the **Datamaxx Applications** list.



Figure 1.30 Datamaxx Installation Menu

For detailed explanations of these configurations in the **Datamaxx Applications** list, see the following chapters:

- Chapter 2 “*Communications Task Setup*”
- Chapter 3 “*User Interface Setup*”
- Chapter 4 “*Extended Security*”

The configuration settings do not have to be set at the time of installation and may be accessed later after installation is complete. If you wish to configure CommTASK after installation is complete, simply close each of the three configuration screens as they appear. CommTASK will have to be configured eventually in order to function properly.

LINXX-2010 Installation

1. Once the CD is inserted into your CD driver, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.31). The user may select the application to begin installation by clicking an item in the **Datamaxx Applications** list.



Figure 1.31 Datamaxx Installation Menu

2. The installation program *Wise Installation Wizard* begins its initialization. This first dialog box describes which version of LINXX-2010 will be installed.



Figure 1.32 Wise Installation Wizard Initialization Dialog Box

3. The installation program begins and you are prompted with the **Welcome to LINXX-2010 Setup Program** dialog box.

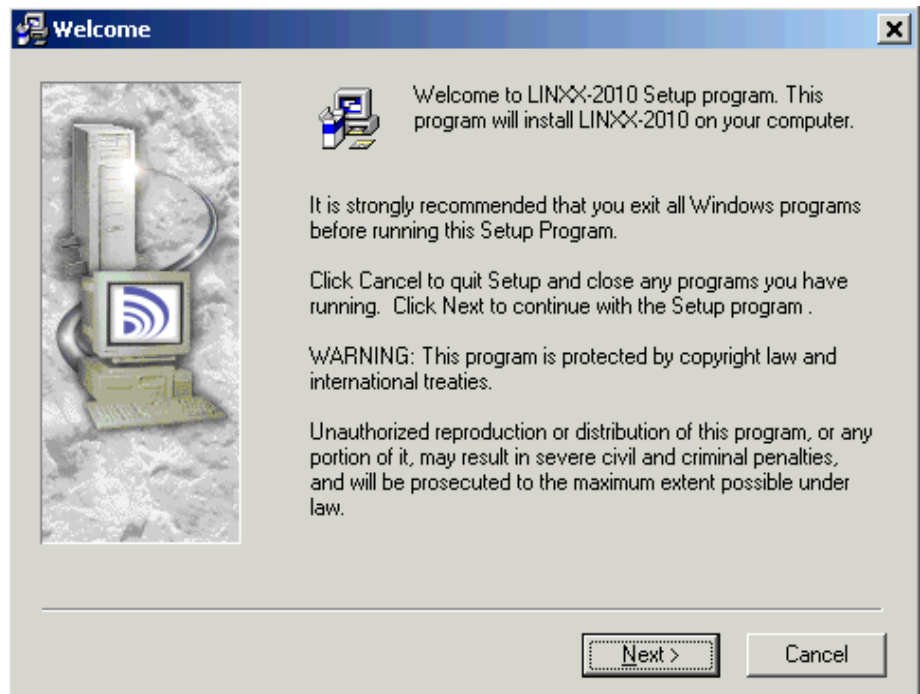


Figure 1.33 Welcome to LINXX-2010 Setup Program Dialog Box

Click the **Next** button to continue, or click **Cancel** to abort the installation process.

4. If the installation process detects that CommTASK is already connected, it will display the following warning.

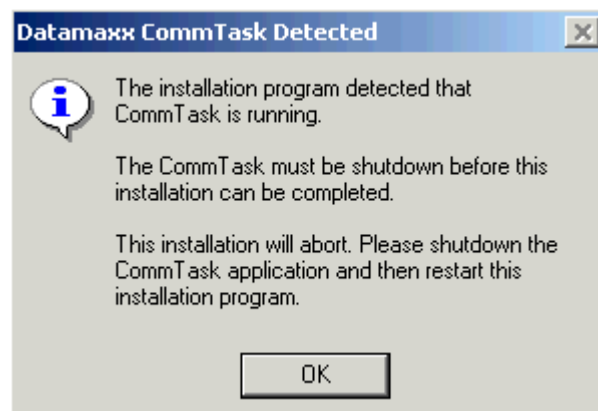


Figure 1.34 Datamaxx CommTASK Detected

Click the **OK** button, then double-click the CommTASK application icon. Disconnect the CommTASK connection by selecting the **File** menu, then click **Exit**.

5. The **ReadMe File** dialog box is displayed with list of the contents for the file. A description of the product and installation notes are topics within the file.

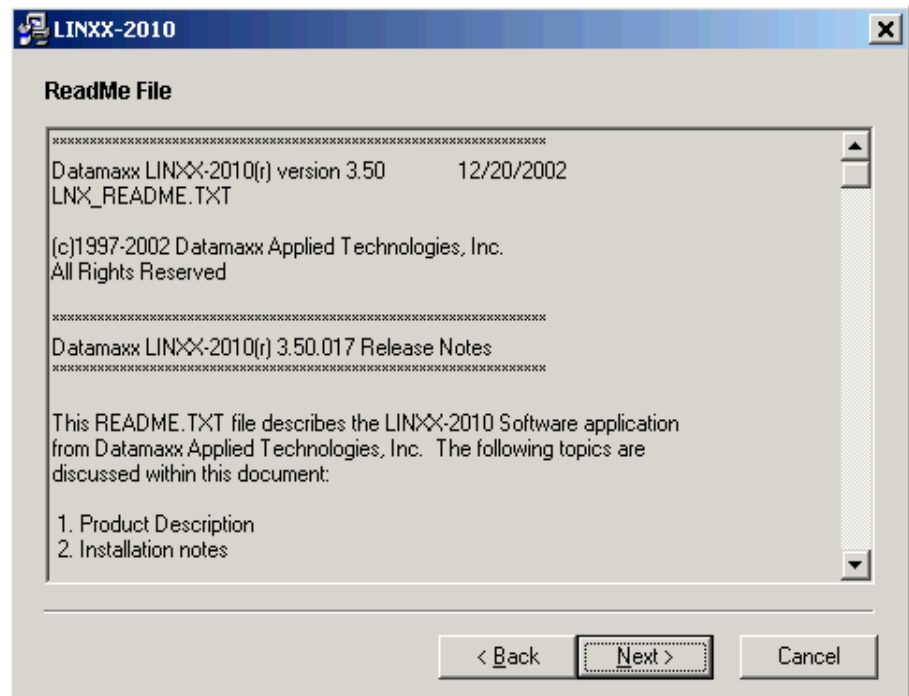


Figure 1.35 Readme File Dialog Box

Click **Next** to continue, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

6. The system administrator may enter the user name of a person, or the name of the agency using the application in the **Registration Information** dialog box.



Figure 1.36 Registration Information Dialog Box

7. The **Select Components** dialog box allows the user to choose which option to install. A user may select from a full installation or an upgrade to an already existing application.

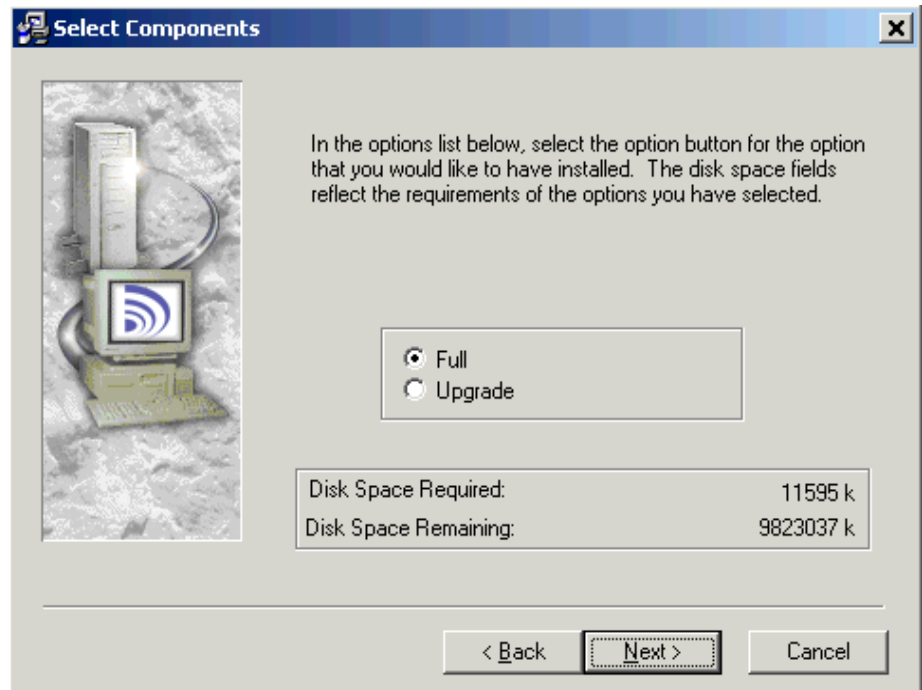


Figure 1.37 Select Components Dialog Box

LINXX-2010 Full Installation

8. Next, the **Choose Destination Location** dialog box is displayed and the user may accept the designated folder to contain the LINXX-2010 system files, or create a new folder.

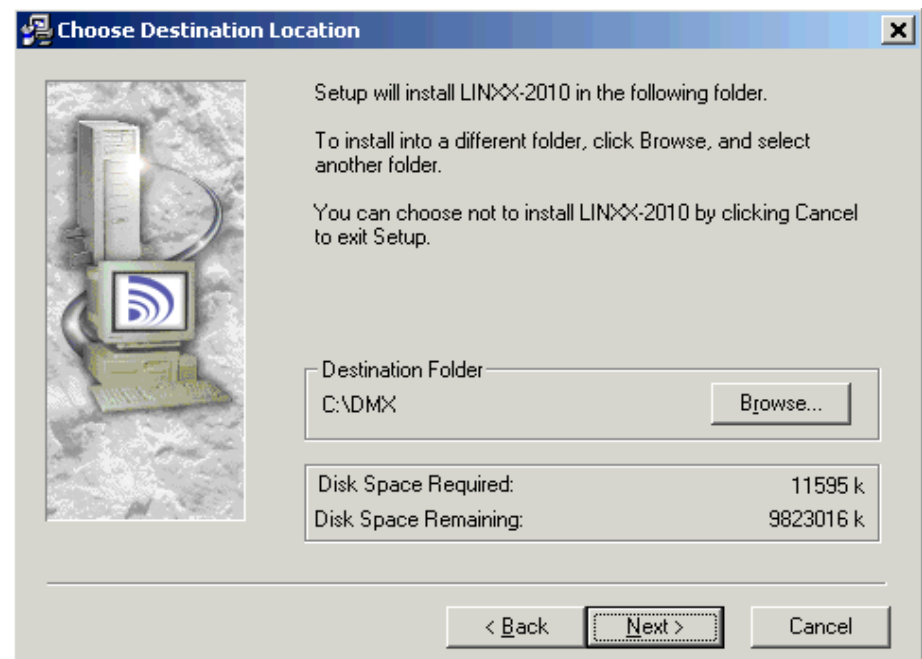


Figure 1.38 Choose Destination Location Dialog Box

Datamaxx recommends that you allow LINXX-2010 to load to the drive designated in the *Destination Folder* section by clicking the **Next** button. However, if you wish to load LINXX-2010 to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

9. In the **Backup Replaced Files** dialog box, the user may choose to backup copies of replaced files. If **Yes** is selected, the user may designate the directory for the backup files or use the default directory.

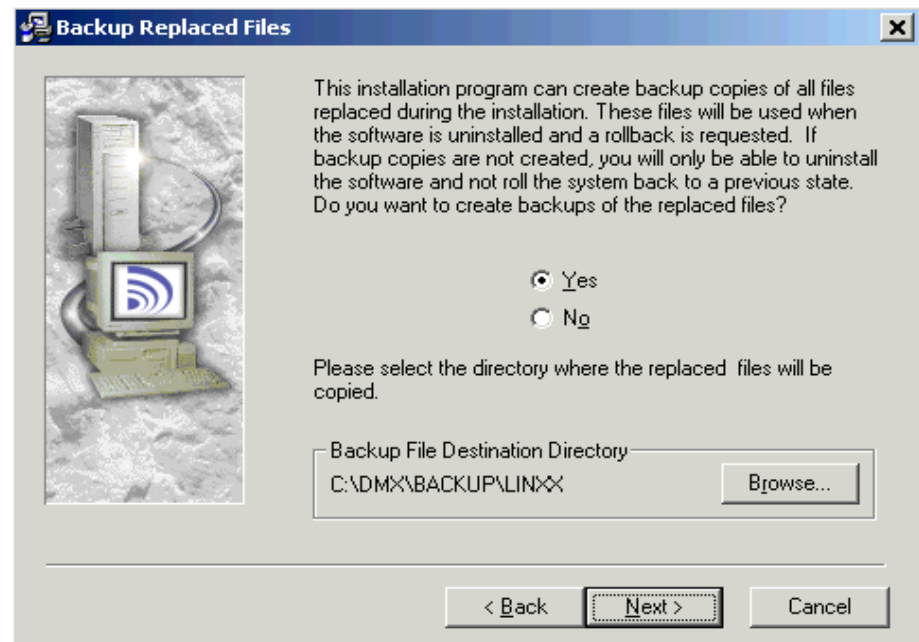


Figure 1.39 Backup Replaced Files Dialog Box

Datamaxx recommends that you allow LINXX-2010 to backup the replacement files to the drive designated in the *Backup File Destination Directory* section by clicking the **Next** button. However, if you wish to load the backup replacement files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process.

10. If **No** is selected in the **Backup Replaced Files** dialog box, the user may not designate the directory for the backup files. Note the **Browse** button is grayed-out (not activated).

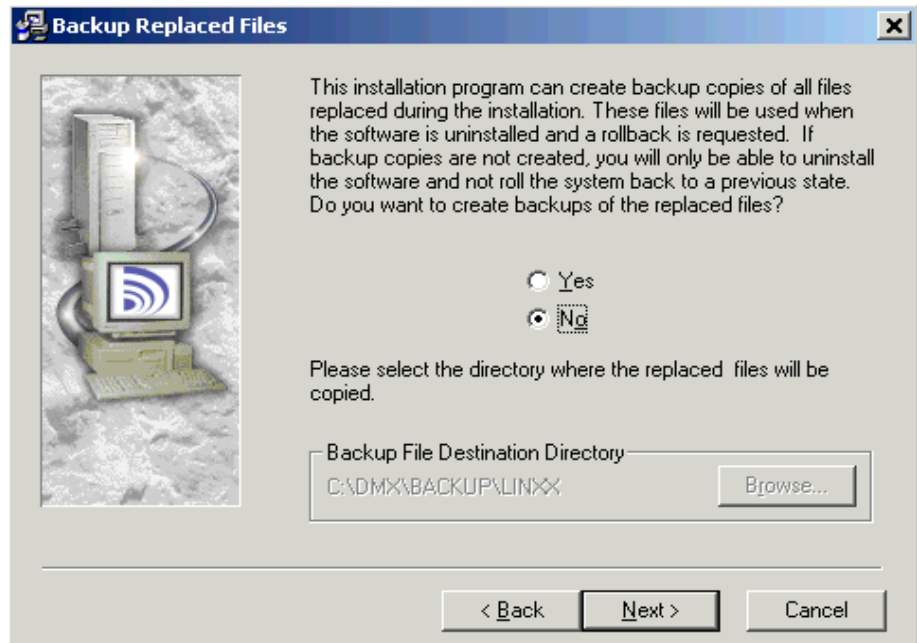


Figure 1.40 Backup Replaced Files Dialog Box

Click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

11. The **Start Installation** dialog box prompts the user to click the **Next** button to begin the installation of LINXX-2010.

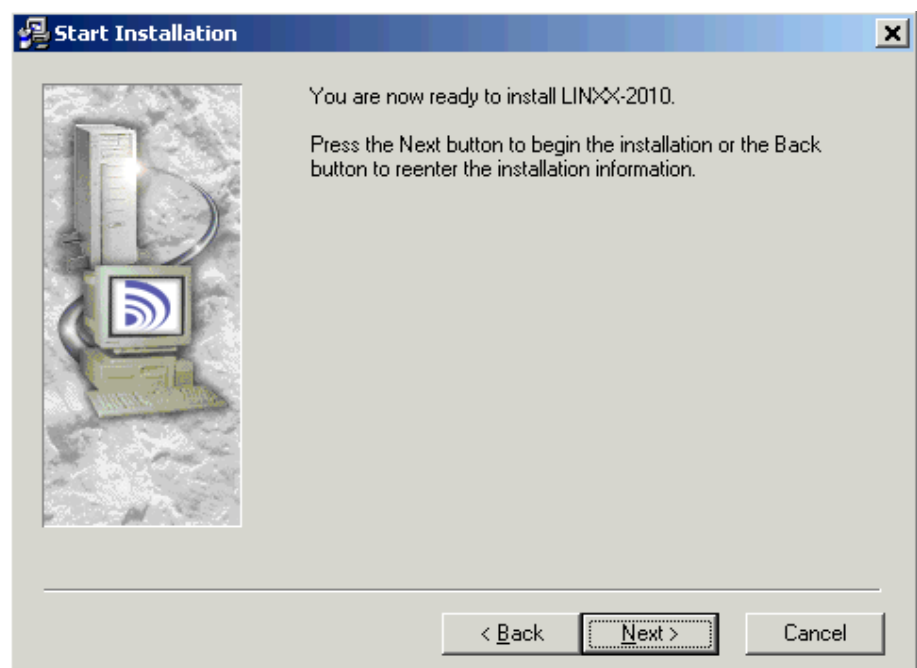


Figure 1.41 Start Installation Dialog Box

12. The **Installing** information box provides the user with a progress meter. The user may click the **Cancel** button to abort the installation process.

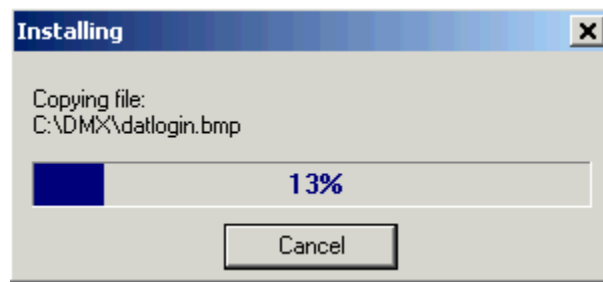


Figure 1.42 Installing Progress Meter

13. Next, the **Install Desktop Shortcut** dialog box provides you with the option to place a shortcut icon for LINXX-2010 on your desktop.

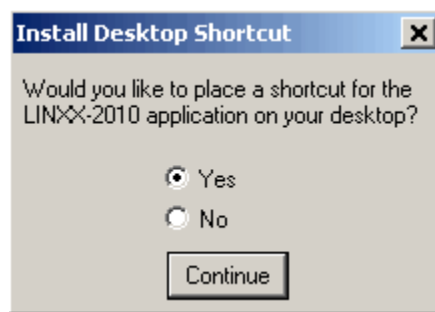


Figure 1.43 Install Desktop Shortcut Dialog Box

14. The **Installation Complete** dialog box prompts the user to click the **Finish** button to complete the installation of LINXX-2010.

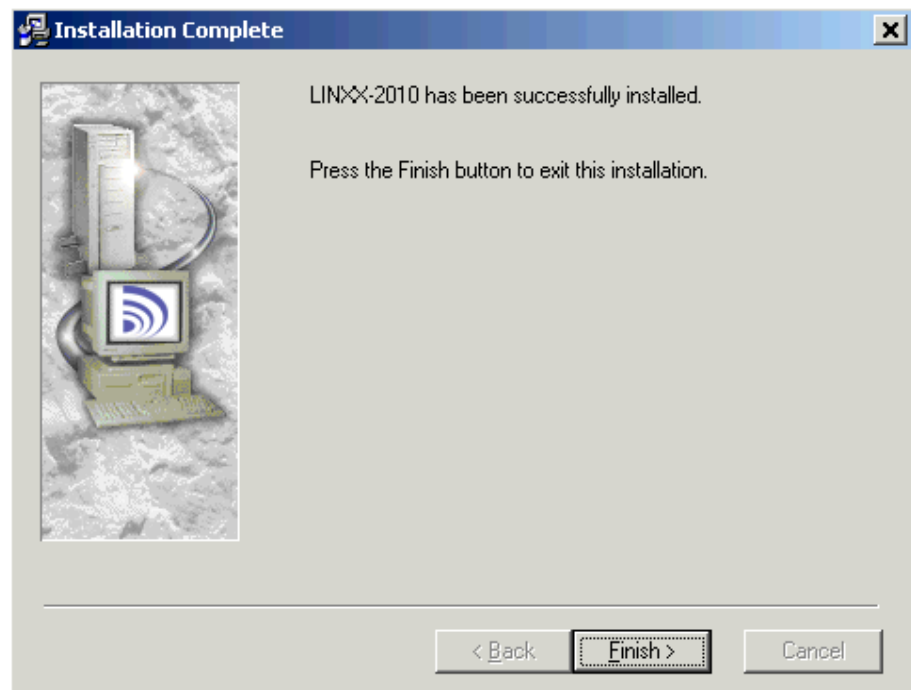


Figure 1.44 Installation Complete Dialog Box

15. Once the installation of LINXX-2010 is complete, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.45). The user may select the application to begin installation of another menu item by clicking that item in the **Datamaxx Applications** list.



Figure 1.45 Datamaxx Installation Menu

LINXX-2010 Upgrade Installation

16. To begin the installation of the LINXX-2010 upgrade, follow steps 6-10 in the *LINXX-2010 Full Installation* section. The **Select Components** dialog box allows the user to choose the Upgrade option for LINXX-2010.

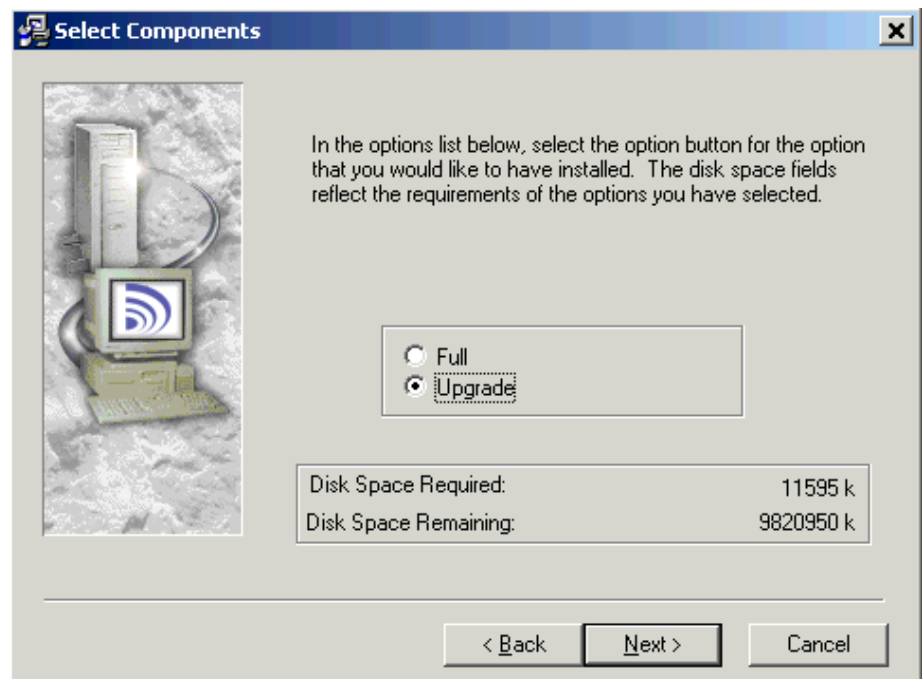


Figure 1.46 Select Components Dialog Box

17. Next, the **Choose Destination Location** dialog box is displayed and the user may accept the designated folder to contain the LINXX-2010 system upgrade files, or create a new folder.

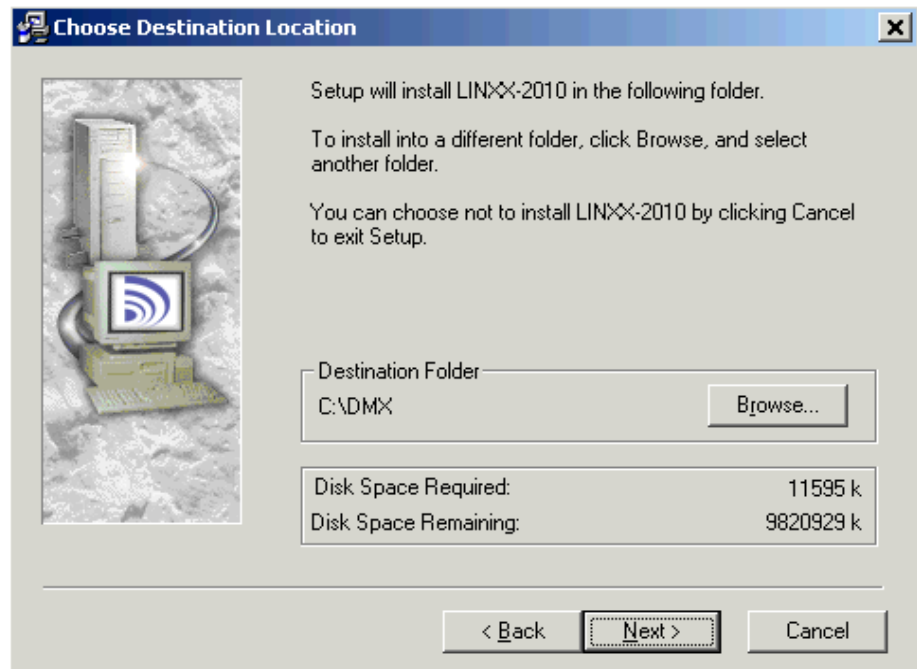


Figure 1.47 Choose Destination Location Dialog Box

Datamaxx recommends that you allow LINXX-2010 to load to the drive designated in the *Destination Folder* section by clicking the **Next** button. However, if you wish to load the LINXX-2010 upgrade files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

18. In the **Backup Replaced Files** dialog box, the user may choose to backup copies of replaced files. If **Yes** is selected, the user may designate the directory for the backup files or use the default directory.

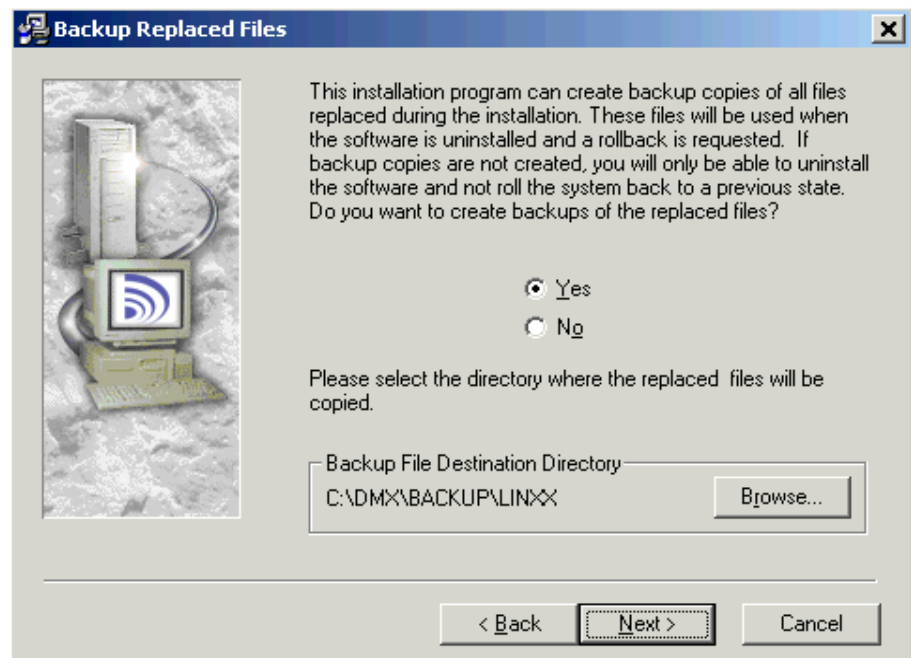


Figure 1.48 Backup Replaced Files Dialog Box

Datamaxx recommends that you allow LINXX-2010 to backup the replacement files to the drive designated in the *Backup File Destination Directory* section by clicking the **Next** button. However, if you wish to load the backup replacement files to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box. Select the correct radio button, then click **Next** to continue.

19. If **No** is selected in the **Backup Replaced Files** dialog box, the user may not designate the directory for the backup files. Note the **Browse** button is grayed-out (not activated).

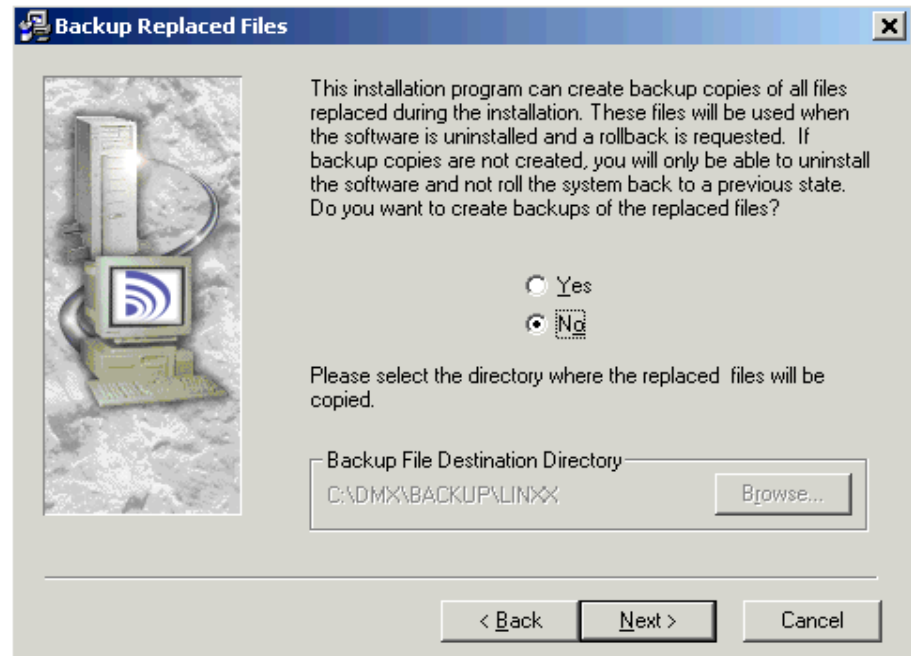


Figure 1.49 Backup Replaced Files Dialog Box

Click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

20. The **Start Installation** dialog box prompts the user to click the **Next** button to begin the upgraded installation of LINXX-2010.

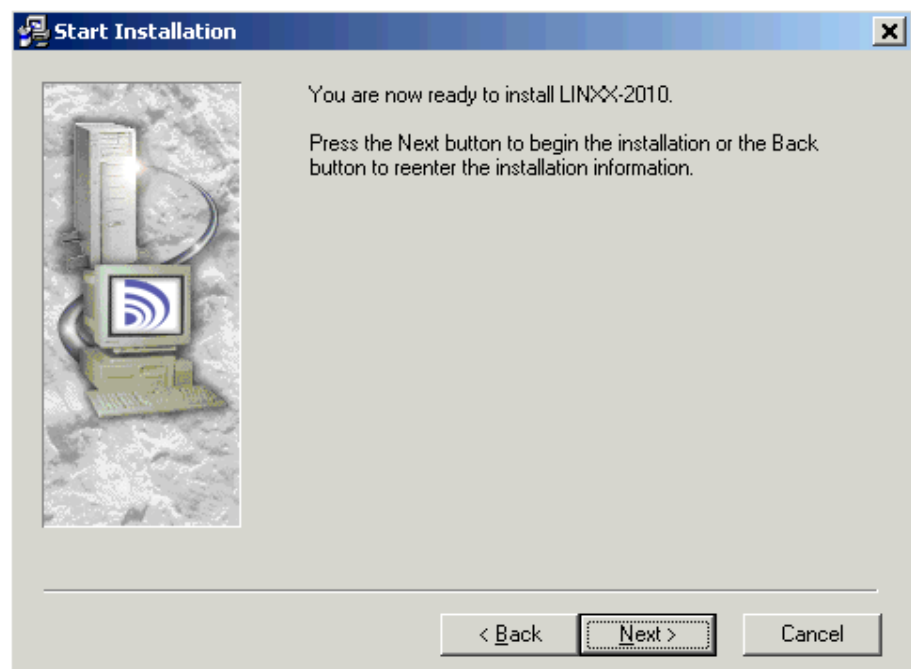


Figure 1.50 Start Upgrade Installation Dialog Box

21. The **Installing** information box provides the user with a progress meter. The user may click the **Cancel** button to abort the upgrade installation process.

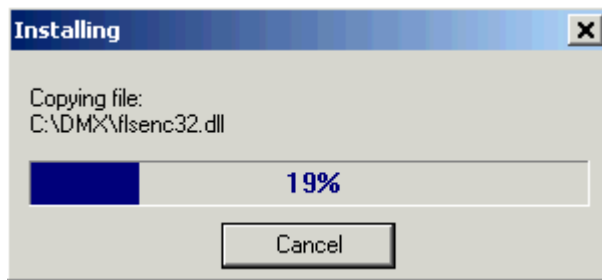


Figure 1.51 Installing Progress Meter

22. Next, the **Install Desktop Shortcut** dialog box provides you with the option to place a shortcut icon for LINXX-2010 on your desktop.

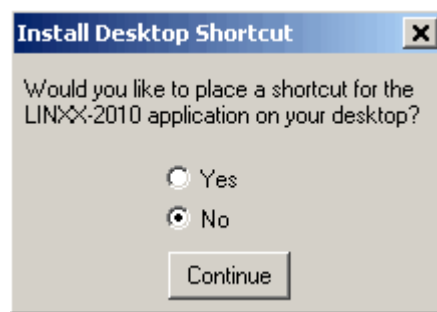


Figure 1.52 Install Desktop Shortcut Dialog Box

23. The **Installation Complete** dialog box prompts the user to click the **Finish** button to complete the upgrade installation of LINXX-2010.



Figure 1.53 Upgrade Installtion Complete Dialog Box

24. Once the upgrade installation of LINXX-2010 is complete, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.54). The user may select the application to begin installation of another menu item by clicking that item in the **Datamaxx Applications** list.



Figure 1.54 Datamaxx Installation Menu

For detailed explanations of these configurations in the **Datamaxx Applications** list, see the following chapters:

- Chapter 2 “*Communications Task Setup*”
- Chapter 3 “*User Interface Setup*”
- Chapter 4 “*Extended Security*”

The configuration settings do not have to be set at the time of installation and may be accessed later after installation is complete. If you wish to configure LINXX-2010 after installation is complete, simply close each of the three configuration screens as they appear. LINXX-2010 will have to be configured eventually in order to function properly.

Datamaxx Documentation

1. Once the LINXX-2010 software is successfully installed, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.55). The user may select the document to begin installation by clicking an item in the **Datamaxx Documentation** list.



Figure 1.55 Datamaxx Installation Menu

2. Click the **Adobe Acrobat 5** menu item in the *Datamaxx Documentation* list to load Adobe Acrobat version 5.0. The *Unpacking Adobe Reader...* progress meter is displayed (see Figure 1.56).

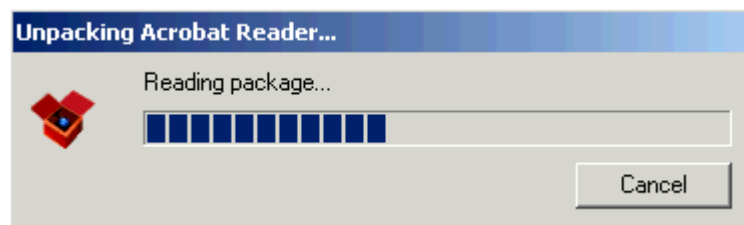


Figure 1.56 Unpack Acrobat Reader Progress Meter

3. Once the Adobe Acrobat Reader software is “unpacked”, the **Acrobat Reader 5.0 Setup** dialog box is displayed (see Figure 1.57). The user may click **Next** to continue, or click **Cancel** to abort the installation process.



Figure 1.57 Acrobat Reader 5.0 Setup Dialog Box

4. Next, the **Choose Destination Location** dialog box is displayed and the user may accept the designated folder to contain the Adobe Acrobat Reader files, or create a new folder.

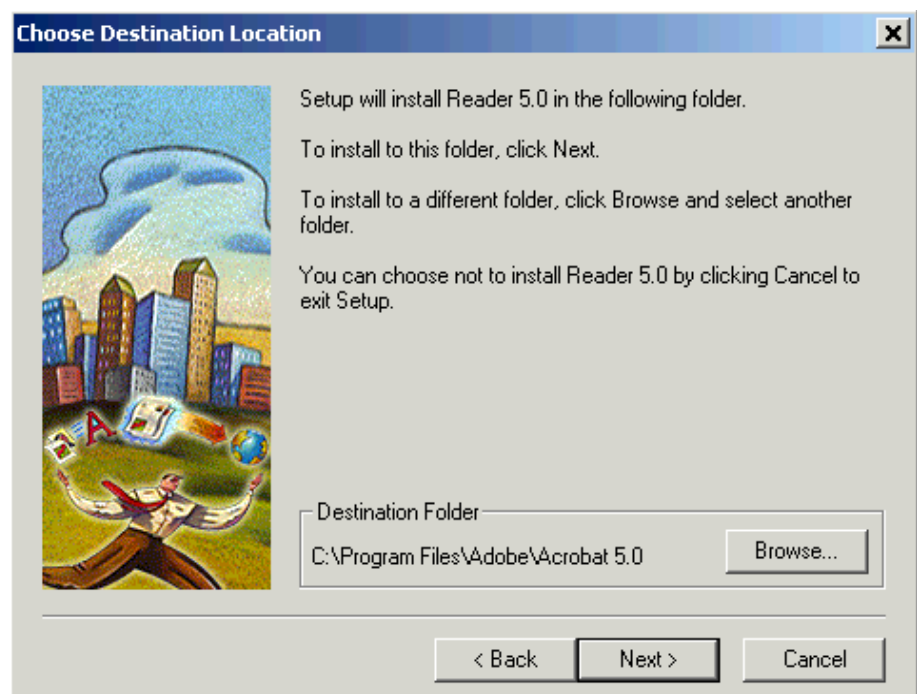


Figure 1.58 Choose Destination Location Dialog Box

Datamaxx recommends that you allow Adobe Acrobat Reader 5.0 to load to the drive designated in the *Destination Folder* section by clicking the **Next** button. However, if you wish to load Acrobat Reader to an alternate drive, click the **Browse** button and select another destination. Once the alternate drive is selected, click **Next** to continue the installation, or click **Cancel** to abort the installation process. The **Back** button will return you to the previous dialog box.

4. The **Copying program files...** provides the user with a progress meter. The user may click the **Cancel** button to abort the copying process.

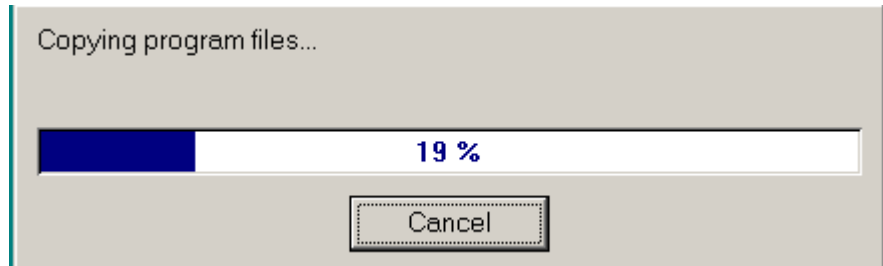


Figure 1.59 Copying Program Files Progress Meter

5. Once the copying process is complete, the user is thanked for choosing the Adobe Acrobat product. This information box signals the successful installation of Adobe Acrobat Reader 5.0.

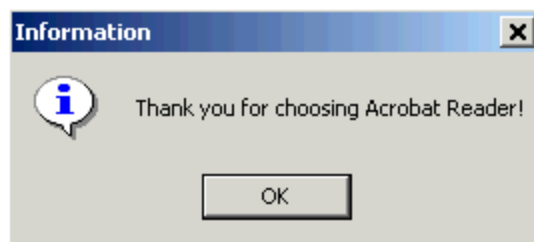


Figure 1.60 Thank You Information Box

6. Once the Adobe Acrobat Reader 5.0 software is successfully installed, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.61). The user may select the document to begin installation by clicking an item in the **Datamaxx Documentation** list.



Figure 1.61 Datamaxx Installation Menu

7. Click the **LINXX-2010 System Manual** menu item in the *Datamaxx Documentation* list to load the System Manual provided by Datamaxx. The **Software License Agreement** dialog box is displayed (see Figure 1.62).



Figure 1.62 Software License Agreement Dialog Box

The user may click the **Accept** button to continue, or click the **Decline** button to abort the installation process. The LINXX-2010 System Manual is automatically displayed on your desktop screen.

8. Once the LINXX-2010 System Manual is successfully installed, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.63). The user may select the document to begin installation by clicking an item in the **Datamaxx Documentation** list.

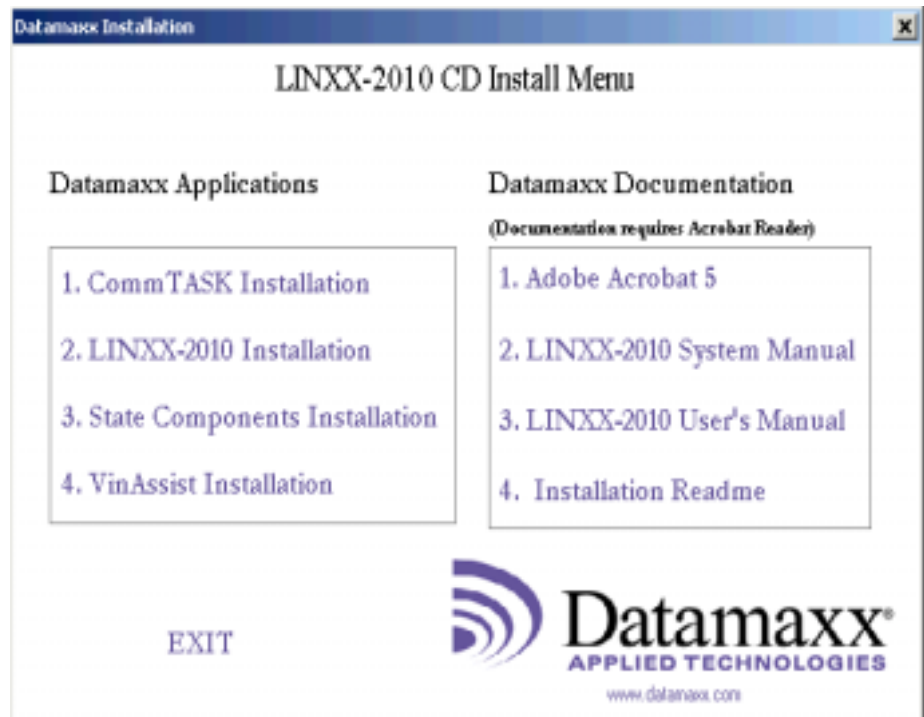


Figure 1.63 Datamaxx Installation Menu

9. Click the **LINXX-2010 User's Manual** menu item in the Datamaxx Documentation list to load the User Manual provided by Datamaxx. The manual is automatically loaded and displayed on your desktop screen. To return to the *Datamaxx Installation Menu*, click the **File** menu located on the toolbar and select **Exit**.

10. Once the LINXX-2010 System Manual is successfully installed, the *Datamaxx Installation Menu* is automatically displayed (see Figure 1.64). The user may select the document to begin installation by clicking an item in the **Datamaxx Documentation** list.



Figure 1.64 Datamaxx Installation Menu

11. Click the Installation Readme menu item in the *Datamaxx Documentation* list to load the ReadMe text provided by Datamaxx. The Readme.txt dialog box is displayed with specific comments related to the installation process (see Figure 1.65).

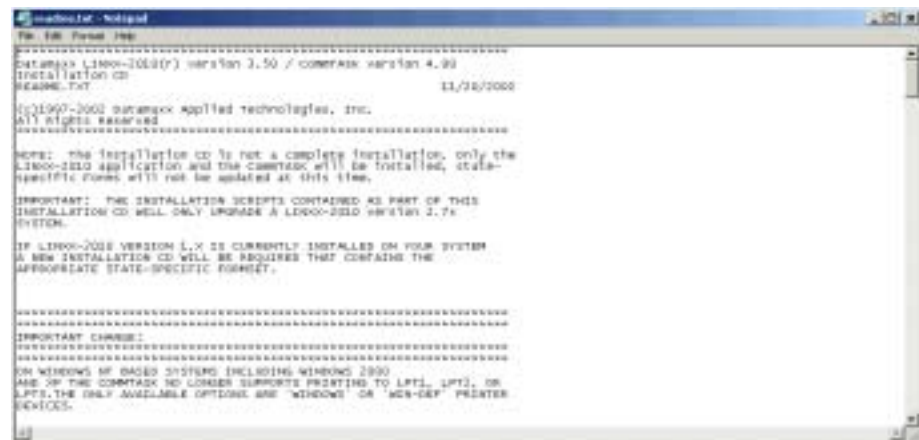


Figure 1-65 Readme Txt Dialog Box

The comments contained in the Notepad may be edited for your convenience (i.e., copy, paste, print, etc.). To return to the *Datamaxx Installation Menu*, click the **File** menu located on the toolbar and select **Exit**. To stop the installation process from the *Datamaxx Installation Menu*, click **EXIT**.

2 COMMUNICATIONS TASK SETUP

This section explains the procedures for setting up state network communication parameters. The **Communications Task Setup** program is used to configure CommTASK®, the application that handles network communications. Most of the communication parameters have been preset to meet your agency's network requirements. You should review the default settings in all of the Communications Task Setup program dialog boxes.

The settings in this program affect network communications. Make adjustments carefully and with a full understanding of the effects to the network.

You must close and restart the CommTASK after you make changes to the settings in this program.

Getting Started

To configure the CommTASK, locate the configuration program at **Start | Programs | LINXX-2010 | Communications Task Setup**. The CommTASK Configuration screen is displayed as shown below in Figure 2.1.



Figure 2.1 CommTASK Configuration Screen

Click **Configure** on the menu bar and a list of menu items is displayed: **General System Options**, **Data Handling Options**, **Printer Options**, and **Communications Options**.

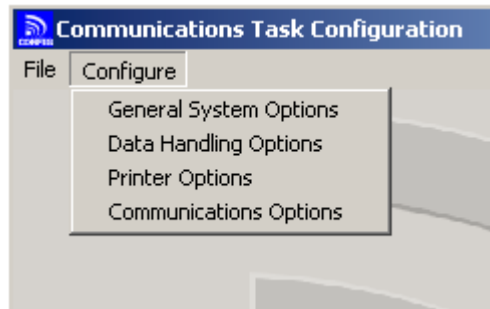


Figure 2.2 CommTASK Configure Menu

The first time you attempt to access these menu items, the Configuration Password dialog box is displayed prompting the user to enter an eight (8) character password.



Figure 2.3 Configuration Password Dialog Box

If a password has been set by your system administrator, type it in and click **OK**. Some states may have a password preconfigured in the software. If no password has been set, click **OK**.

General System Options

General System Options is the first item in the **Configure** menu. The dialog box for **General System Options** allows the user to setup configurations, shutdown passwords, define hardware settings, perform file transfers, monitor different functions, and perform system log functions.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The dialog box is divided into groups of fields. There are five groups in the **General Systems Options** dialog box: **Passwords**, **Hardware Settings**, **File Transfers**, **Monitor Functions**, and **System Log Functions**.

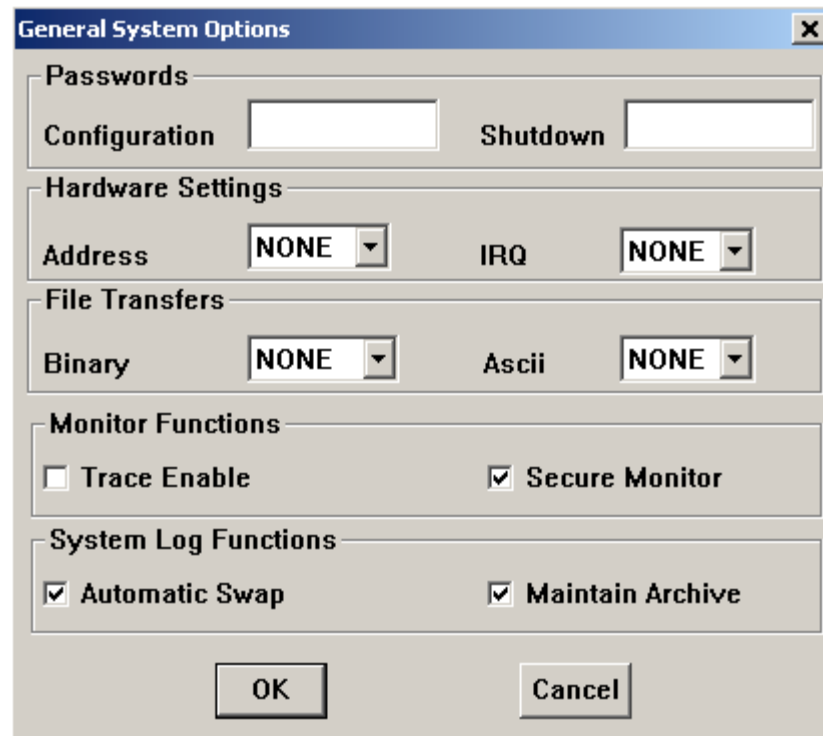
The image shows a screenshot of the 'General System Options' dialog box. It has a title bar with a close button. The dialog is divided into five sections: 'Passwords' with 'Configuration' and 'Shutdown' text boxes; 'Hardware Settings' with 'Address' and 'IRQ' dropdown menus set to 'NONE'; 'File Transfers' with 'Binary' and 'Ascii' dropdown menus set to 'NONE'; 'Monitor Functions' with 'Trace Enable' (unchecked) and 'Secure Monitor' (checked) checkboxes; and 'System Log Functions' with 'Automatic Swap' and 'Maintain Archive' (both checked) checkboxes. At the bottom are 'OK' and 'Cancel' buttons.

Figure 2.4 General System Options Dialog Box

Passwords

Passwords must be eight characters and may include a combination of numbers, spaces, and upper and lower case letters.

Password checking is *case sensitive*; meaning the password must be entered exactly as it was assigned. For example, if the password is “Datamaxx”, the user must enter a capital “D” and lower case “atamaxx”. It is a good idea to write down the passwords you use and keep them in a safe place. Also, keep passwords standard in relation to case. The user must decide whether all passwords are either upper or lower case for consistency’s sake. This makes the password easier to remember. Keep in mind, if you assign a password that is less than eight characters, the computer will automatically insert spaces randomly to complete eight characters and your password may not work. If you wish to pad the password with spaces, insert them into the password yourself instead of letting the computer decide where the spaces are to be placed.

Configuration

Set an eight (8) character password in this field to protect the CommTASK Setup program from unauthorized access.

Shutdown

The password set in this field is required of the user to close the CommTASK Setup program.

Hardware Settings

These two fields define the PC base address and interrupt settings for a Datamaxx interface card, if one is installed. Refer to Chapter 1 *Installing LINXX-2010* for details regarding Datamaxx interface cards. These fields do not need to be set if any other interface card is used. Use the mouse pointer to scroll through the list boxes in these fields and select the settings that match your interface card.

Address

Enter the PC base address from the Datamaxx interface card (if installed) in this field. The valid values for this field are:

3F8	2E0	340
2F8	200	380
3E8	240	3F0
2E8	280	2F0
2C0	3E0	300

IRQ

Enter the interrupt used by the Datamaxx interface card (if installed) in this field. The valid selections for this setting are:

3
4
5
7

File Transfers

The **Binary** and **ASCII** fields define the characteristics of transferred files.

Binary

This field allows you to select the type of files that may be transferred. The options for this setting are:

NONE

No files may be transferred.

DATA

Only data files (i.e., files without a COM, BIN, DLL or EXE extension) may be transferred.

ALL

All types of files may be transferred.

ASCII

This field allows you to add a carriage return or line feed to the end of each line transferred in an ASCII file. The options for this setting are:

NONE

No carriage return/line feed is added.

CR-LF

Adds a carriage return before every line feed in a transferred file.

LF-CR

Adds a line feed after every carriage return in a transferred file.

Monitor Functions**Trace Enable**

Check this box to enable the Datamaxx Trace Facility. This utility is used to diagnose communications problems. When this box is deactivated, the Trace Facility will be disabled. Note that trace files can quickly become large and take up needed hard drive space if left unmonitored.

Secure Monitor

This option only applies to polled RS232 protocols. Check this box to activate the communication line monitor to display only the traffic for this workstation. If this box is deactivated, the communication line monitor will display all network traffic that is transmitted to any workstation on the same communication line. For investigative security precautions, it is suggested that this item always be checked (turned on) unless full line monitoring is needed for diagnostic/troubleshooting procedures.

System Log Functions

Automatic Swap

Check this box to activate the automatic swap feature that back ups the current message log to hard disk. When the log reaches 95% of the 4,096-message capacity of a single user system, or 95% of the 16,384-message capacity of a LAN, it will be necessary to create a backup. Two actions are taken with the current log when the automatic swap option is activated: (1) the current log is backed up to the archive on the hard drive (*DMXLARCH* directory); (2) the current log is copied to the **Previous 1** log. This clears the current log enabling it to fill up with new messages. The **Previous 2** log is copied to the **Previous 3** log, and the **Previous 1** log shifts down and overwrites the **Previous 2** log.

Maintain Archive

This feature makes a copy of the **Current** message log set before it is deleted and places the copy in the *DMXLARCH* subdirectory. This setting is valid only when **Automatic Swap** is enabled. The **Current** message log is renamed to *MNDXhhmm.ddd* and *MDAThhmm.ddd*, located in the *DMXLARCH* subdirectory.

In the two files *MNDX* and *MDAT* listed above, *hhmm* is the hour and minutes the archive was created and *ddd* is the day of the year (365). For example, *MDAT1032.175*, is the archived **Current** log set that was created at 10:32 a.m., on the 175th day of the year. The *MNDXhhmm.ddd* file contains an associated index to the *MDAThhmm.ddd* data file.

CommTASK will determine the available hard disk space and notify the user if there is inadequate disk space to perform the archive.

Data Handling Options

The second item in the **Configuration** menu is **Data Handling Options**. The settings in this dialog box are preset and grouped into four categories: *Data Controls*, *Case Controls*, *Transmit Controls*, and *Process Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

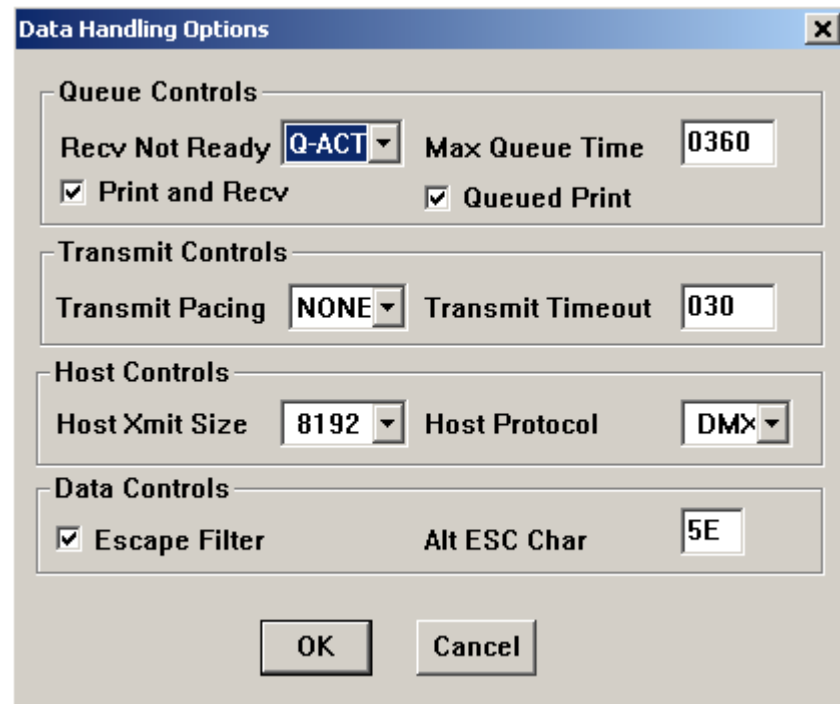


Figure 2.5 Data Handling Options Dialog Box

Queue Controls

Recv Not Ready

This option defines the action to be taken if messages are sent to the workstation, but no applications are in a “Ready to Receive” state. Valid values are listed and described below:

PRINT

Messages are printed.

Q-ACT

Copies of the messages are queued to the **active** applications that use the CommTASK simultaneously.

LOG

Messages are placed in the message log only.

Q-ALL

Copies of the messages are queued to **all** applications that use the CommTASK simultaneously.

REJECT

Messages are rejected.

Max Queue Time

This option states the length of time in seconds that a received, but not yet viewed, message will wait on a local queue before it is sent to the designated network printer. The valid values for this option are:

0-0360

In general, a good maximum time setting is 360 seconds, or 6 minutes. Messages remain on a local queue for the specified time. The messages are then sent to the network printer.

Print and Recv

This option states whether or not incoming messages are to be sent to the screen when the screen is in **Receive** mode *and* the designated network printer is enabled. Valid values are listed and described below.

Checked

Incoming network messages are *both* printed *and* sent to a window that is in **Receive** mode, unless the printer is disabled.

Unchecked

Incoming network messages are printed as long as the printer is enabled, but they *will not* be sent to a window even though the window is in **Receive** mode.

Queued Print

This option defines whether or not data may be queued for printing if the printer is physically disabled (e.g. paper out). Valid values are listed and described below.

Checked

Network messages will be queued for printing if the printer is physically disabled.

Unchecked

Messages may not be queued for printing if the printer is physically disabled.

Transmit Controls

Transmit Pacing

This option controls the pacing function. Pacing is a technique that allows for staggering of messages. When an application saturates the communications line with a constant stream of messages, pacing helps to avoid “collision” of these messages. Valid values for this option are listed and described below.

NONE

Transmit pacing is not enabled.

MSG

Wait for a message to be received before sending the next message.

1SEC

Wait one (1) second before sending another message.

2SEC

Wait two (2) seconds before sending another message.

3SEC

Wait three (3) seconds before sending another message.

Transmit Timeout

This option sets the time (in seconds) that will be allowed to elapse before a message that has been sent, but not acknowledged, is canceled with an error. Valid values are shown below.

0-0999 (seconds)

This time is determined by your system administrator.

Host Controls

Host Transmit Size

This option sets the maximum size (in characters) of messages that will be transmitted. These values are the message sizes the host is allowed to accept. Messages that exceed the size selected will be rejected with an error. The valid values for this setting are listed and described below.

1400
1920
2048
3072
4096
8192
15300
24400
32K
64K

Host Protocol

This option indicates the host display protocol used for network communications. Valid values for this option are:

DMX

Set for the Datamaxx protocol.

BUR

Set for the Unisys Burroughs Poll Select protocol.

UTS

Set for the Unisys Uniscope protocol.

HDS

Set for the Bull VipSync protocol.

3270

Set for the IBM 3270 protocol.

Data Controls

Escape Filter

This option defines whether display escape sequences are to be acted upon or suppressed, and works in conjunction with the **Host Protocol** option. When this field is enabled (checked), Escape sequences are suppressed. When this field is disabled, Escape sequences are not filtered but passed to the client application.

Alt Esc Char

This setting defines the character that acts as an alternate ASCII Escape character.

Printer Options

The settings in this dialog box pertain to network message printing. The network printer primarily prints network messages. Do not confuse the network printer with a printer that is attached to a Local Area Network (LAN).

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

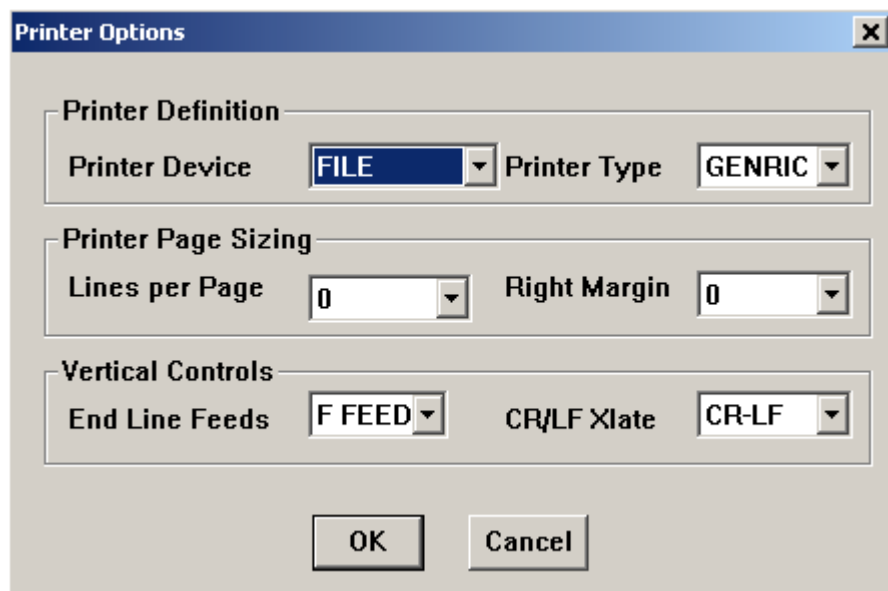


Figure 2.6 Printer Options Dialog Box

Printer Definition

Printer Device

This field defines the port that is connected to the network printer. The options for this setting are shown below.

COM-S

Select this setting when the network printer is connected via a cable supplied and configured by Datamaxx to the Datamaxx interface card serial port (if installed).

COM-P

Select this setting when the network printer is connected to the Datamaxx Interface Card parallel port (if installed).

LPT-1

Select this setting when the network printer is connected to the LPT-1 printer port.

LPT-2

Select this setting when the network printer is connected to the LPT-2 printer port.

LPT-3

Select this setting when the network printer is connected to the LPT-3 printer port.

GATEWAY

Select this setting when the network printer is connected to the Datamaxx Gateway Interface Card (if installed).

FILE

When this option is selected all network messages are written to a file named DMXPRINT.DAT in the *DMX* directory. Data will accumulate in this file and may be copied and reset at any time using standard Windows Explorer functions.

WIN-DEF

Use Windows Default Printer.

WINDOWS

Use a user defined Windows Printer.

Printer Type

This field defines the type of printer that is designated as the network printer. The options for this field are shown below.

GENERIC

The CommTASK will filter Escape sequences when this option is selected.

OKIDATA

Select this option when the printer type is an Okidata printer and the lines per page and the right margin values are **not** set to zero (0). CommTASK will filter Escape sequences when this option is selected.

IBM

Select this option when the printer type is an IBM Proprinter and the lines per page and the right margin values are **not** set to zero (0). CommTASK will filter Escape sequences when this option is selected.

PASS

Select this option for any printer type. CommTASK will not filter Escape sequences when this option is selected. All state network data will be printed.

WIN 10

Use Windows GDI printing with 10 point font.

WIN 12

Use Windows GDI printing with 12 point font

Printer Page Sizing**Lines per Page**

This field allows you to set the number of lines per page on the printer controlling the form length. This option is used only if the Okidata or IBM printer type is selected in the **Printer Type** setting. If the Printer Type is set to **Generic**, this option will have no effect on the lines per page. The selections for this setting are:

0-100

This option defines the number of lines (vertically) that make up a printed page. If this option is set to zero (0), the printer default settings will be used.

Right Margin

This field defines the number of lines per column on the printed page controlling the form width. The selections for this setting are:

0-121

This option defines the number of lines per column on a printed page. If this option is set to zero (0), the printer default settings will be used.

Vertical Controls**End of Line Feeds**

This option defines the extra characters to be added at the end of a printed message. Valid values for this option are listed and described below.

0-60

The number of *Line* Feed characters that are added at the end of a printed message.

F-FEED

A *Form* Feed is added at the end of a printed message.

CR/LF Xlate

This option defines special handling for printer control characters. Valid values are listed and described below.

NONE

No special handling.

CR-LF

This option adds a carriage return to line and form feed characters.

LF-CR

This option adds a line feed to carriage return characters.

Communications Options

The **Communications Options** dialog box is used to set the communication address and controls for a specific protocol. The user may select a protocol from the following subsections and review the specific communications options for that protocol.

TCP/IP

The **Communications Options** enable your system to connect to the host network. The following instructions for TCP/IP explain each field and list possible variables. The **TCP/IP Communication Options** dialog box is organized into four groups: *Host TCP/IP Address*, *Local Interface*, *Keep Alive Controls*, and *Connection Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The screenshot shows a dialog box titled "TCP/IP Communication Options". It is divided into four main sections, each with a title bar and a group box:

- Host TCP/IP Address**: Contains three fields: "IP Addr" with the value "170.214.12.10", "Host Port" with the value "06600", and "Name" which is empty.
- Local Interface**: Contains two fields: "Name" which is empty, and "Local Port" with the value "00000".
- Keep Alive Controls**: Contains two fields: "Data" which is empty, and "Interval" with the value "045".
- Connection Controls**: Contains two fields: "Interval" with the value "0060", and "Msg Level" with a dropdown menu set to "NONE".

At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 2.7 TCP/IP Communications Options Dialog Box

Host TCP/IP Address

This group of fields sets the Address, Port and Name for the host.

IP Address

TCP/IP address of the control terminal agency (State Interface).

Host Port

The specific Host port number used by the Host computer.

Name

This field is applicable if using DNS (Domain Name System). DNS is a distributed directory service used to translate between system names and IP addresses. If left blank, or if the DNS is incorrect, the **IP Address** field will be used by the CommTASK to ascertain the Host address. DNS will only work if the workstation is configured correctly and has the proper Datamaxx DNS drivers.

Local Interface

This group of fields sets the Name and Port for the local interface.

Name

Logical name of the communications interface as assigned by the control terminal agency.

Local Port

The specific local port number used to establish communications with the host.

Keep Alive Controls

This group of fields sets the Data and Interval during “Keep Alive” sessions.

Data

Text sent to the host computer during “Keep Alive” sessions.

Interval

The time (in seconds) between Keep Alive data.

Connection Controls

This group of fields sets the Interval and Message Level status when connected to the host.

Interval

The time interval (in seconds) that will elapse between attempts by the CommTask to retry failed connections to the host computer; for example: **0030** (30 seconds).

Msg Level

Level of network status message displayed to the end-user.

None

No message displayed.

Stat

Messages regarding network status will be displayed.

Error

Only error status messages will be displayed.

All

All status messages will be displayed.

2780 BiSync

The **2780 BiSync Communications Options** enable your system to connect to the host network. The following instructions for 2780 BiSync explain each field and list possible variables. The **2780 BiSync Protocol Options** dialog box is organized into four groups: *Communications Settings*, *Protocol Settings*, *Timing Controls*, and *Interface Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

2780 BiSync Protocol Options			
Communications Settings			
Interface	Slave	Turn Delay	10
Baud Rate	9600	Sync Clocks	Ext
Protocol Settings			
Busy Resp	Tot	Not Ready Resp	Nak
Data Error Resp	Nak	Prot Error Resp	Eot
Timing Controls			
Contention	2	Timeout	2
Post WAK	2	Retry Count	10
Interface Controls			
Block Size	640	Name	
OK		Cancel	

Figure 2.8 2780 BiSync Protocol Options Dialog Box

Communication Settings

This group of fields defines the communication settings.

Interface

This field has two options for the interface setting:

Slave

The interface is a slave to the Host.

Master

The interface is the master, and the Host is the slave.

Baud Rate

This field identifies the network modem baud rate. It only has an effect when the **Sync Clocks** field is set to **INT**. The maximum rate is 19,200 baud.

Turn Delay

This field states the amount of time the communications function should wait before responding to a request from the communications line. It is used on lines that have constant “Clear to Send” to prevent the communications server from responding before the Host computer is ready.

Sync Clocks

This toggle field defines the source of the communication line synchronous clock. This option should never be modified without authorization, as an error will cause the communication handler to lose access to the network. Values for this field are listed and described below.

EXT

The clocks will be provided by a source external to the communications interface (e.g. the modem).

INT

The clocks will be provided by the communications interface itself.

Protocol Settings

This group of fields defines the protocol settings.

Busy Resp

This field defines the reply that will be sent if the communications interface is busy and is unable to receive a message.

Data Error Resp

This field defines the reply that will be sent if the communications interface detects a communications error in a message.

Not Ready Resp

This field defines the reply that will be sent if the communications interface is not ready and is unable to receive a message.

Prot Error Resp

This literal field defines the reply that will be sent if the communications interface detects a logical protocol error and needs to reset the host synchronization.

Timing Controls

This group of fields defines the timing controls.

Contention

This field defines the number of seconds that the communications interface will wait before attempting to send a message following a contention condition.

Post WAK

This field defines the number of seconds that the communications interface will wait before attempting to send a message following a WAK (Temporary Wait) request from the host.

Timeout

This field defines the number of seconds that the communications interface will wait for a response from the host before entering error recovery procedures and requesting re-transmission of a message or response.

Retry Count

This field defines the number of times the communications interface will retry an error before considering it permanent and notify the communications server.

Interface Controls

This group of fields defines the interface controls.

Block Size

This field defines the maximum block size to be used by the communications interface when sending messages to the host.

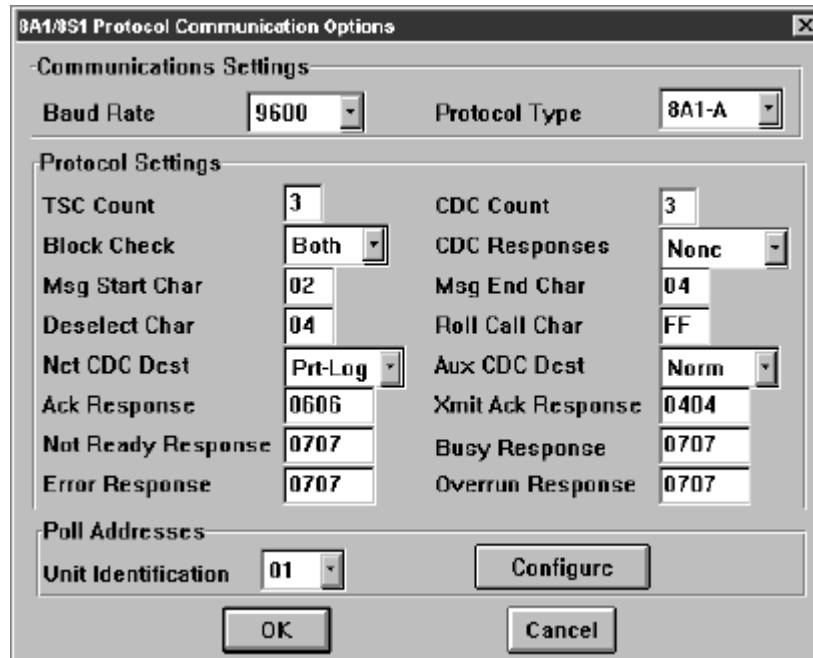
Name

This field states the logical name of the interface, if required by the specific host configuration.

8A1

The **Communications Options** enable your system to connect to the host network. The following instructions for 8A1 explain each field and list possible variables. The **8A1 Protocol Communication Options** dialog box is organized into three groups: *Communications Settings*, *Protocol Settings*, and *Poll Addresses*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.



The dialog box is titled "8A1/8S1 Protocol Communication Options". It contains three main sections: "Communications Settings", "Protocol Settings", and "Poll Addresses".

- Communications Settings:**
 - Baud Rate: 9600 (dropdown)
 - Protocol Type: 8A1-A (dropdown)
- Protocol Settings:**
 - TSC Count: 3 (text box)
 - Block Check: Both (dropdown)
 - Msg Start Char: 02 (text box)
 - Deselect Char: 04 (text box)
 - Nct CDC Dcst: Prt-Log (dropdown)
 - Ack Response: 0606 (text box)
 - Not Ready Response: 0707 (text box)
 - Error Response: 0707 (text box)
 - CDC Count: 3 (text box)
 - CDC Responses: None (dropdown)
 - Msg End Char: 04 (text box)
 - Roll Call Char: FF (text box)
 - Aux CDC Dcst: Norm (dropdown)
 - Xmit Ack Response: 0404 (text box)
 - Busy Response: 0707 (text box)
 - Overrun Response: 0707 (text box)
- Poll Addresses:**
 - Unit Identification: 01 (dropdown)

Buttons at the bottom: OK, Cancel, and a "Configure" button next to the Unit Identification dropdown.

Figure 2.9 8A1 Protocol Communications Options

Communication Settings

This group of fields defines the Host communications settings.

Baud Rate

This field is used to set the line speed for the communications line to the Host. The values for this field are:

110, 150, 300, 600, 1200, 1800, 2400, 4800, 9600, 19200

Protocol Type

The value entered in this field determines the type of communications between the workstation and the Host. The valid values for this field are shown below.

8A1-A, 8S1, 8A1-B, 8A1-I, WU-35

Protocol Settings

This group of fields define the Host protocol settings.

TSC Count

This field has the count of characters used in the TSC sequence, including any trailing "pad" characters.

Block Check

This field states whether block checking is to be performed on inbound messages, outbound messages, or both types of messages.

Msg Start Char

This hex field defines the character to be sent to the network as the first character of a message block.

Deselect Char

This hex field defines the character to be used to deselect the workstation and set it to an idle state.

Net CDC Dest

This field defines any special processing that will be applied to the NET CDC address. The valid values for this field are shown below.

NORM

Normal processing, as per queue rules.

PROC

Load the message to the process queue.

PRINT

Direct the message to the printer (not screen) session defined to the unit, but do not log it.

PRT-LOG

Direct the message to the printer (not screen) session defined to the unit, and log it (**Default**).

Ack Response

This hex field allows for two characters of positive acknowledgment to the network. The second character (rightmost pair of digits) is the Poll Code, derived from a hexadecimal chart; for example, Poll Code “G” is entered as “47” using the hexadecimal chart. The Poll Code is determined for each agency by the state.

Not Ready Response

This hex field allows for two characters of *Not Ready* negative acknowledgment to the network. The second character (rightmost pair of digits) is the Poll Code, derived from a hexadecimal chart; for example, Poll Code “G” is entered as “47” using the hexadecimal chart. The Poll Code is determined for each agency by the state.

Error Response

This hex field allows for two characters of error condition (e.g. parity error) to be sent to the network. It is requested by a Roll Call. The second character (rightmost pair of digits) is the Poll Code, derived from a hexadecimal chart; for example, Poll Code “G” is entered as “47” using the hexadecimal chart. The Poll Code is determined for each agency by the state.

CDC Count

This field has the count of characters used in the CDC sequence, including any trailing “pad” characters.

CDC Responses

This field states whether the workstation will give a response to a Group, Network or Auxiliary Port CDC, or just receive the message, if optioned for this condition.

Msg End Char

This hex field defines the character used as the last character of a message block to or from the network.

Roll Call Char

This hex field defines the character to be used to define an explicit Roll Call select sequence to the workstation. Note that if the received message block is terminated with the Message End character, a Roll Call select may follow the Message End character directly, without the need for the Roll Call character. This is known as an *implicit* Roll Call.

Aux CDC Dest

This field states any special processing that will be applied to the Aux CDC address. The valid values for this field are shown below.

NORM

Normal processing, as per queue rules (**Default**).

PROC

Load the message to the process queue.

AUX

Direct the message to the auxiliary port (if so equipped), but do not log it.

AUX-LOG

Direct the message to the auxiliary port (if so equipped) and log it.

Xmit Ack Response

This hex field allows for two characters of final transmission acknowledgment to the network, provided no more messages are ready for transmission to the network computer. If only a single character is desired, the second character must be set to “FF”.

Busy Response

This hex field allows for two characters of a System Busy error condition to be sent to the network. It is provided only as a response to an initial select sequence. The second character (rightmost pair of digits) is the Poll Code, derived from a hexadecimal chart; for example, Poll Code “G” is entered as “47” using the hexadecimal chart. The Poll Code is determined for each agency by the state.

Overflow Response

This hex field allows for two characters of Data Overflow error condition (i.e., message too large for buffer) to be sent to the network. It is requested by a Roll Call. The second character (rightmost pair of digits) is the Poll Code, derived from a hexadecimal chart; for example, Poll Code “G” is entered as “47” using the hexadecimal chart. The Poll Code is determined for each agency by the state.

Poll Addresses

Unit Identification

This field selects which of the poll units (1 through 20) is to be configured.

Configure

This section covers the **Poll Address Configuration** dialog box for the 8A1 protocol. This dialog box appears when you click the **Configure** button within the *Poll Addresses* section of the **8A1 Communications Options** dialog box.

In the example shown in Figure 2.10, the state-supplied Poll Code “A” translates into the hexadecimal number “41.”

Poll Address Configuration, Unit - 01						
Poll Code						
TSC	13	41	05	Dc3 A Enq		
Select Codes						
CDC	41	41	05	A A Enq		
CDC (Group)	41	42	05	A B Enq		
CDC (Net)	41	43	05	A C Enq		
CDC (Aux)	04	04	7F	Eot Eot Pad		
OK				Cancel		

Figure 2.10 Poll Address Configuration Dialog Box

Poll Codes

This field states the poll character for the physical address (as defined by the **Unit ID** field) being configured.

Poll Codes

TSC

These three hex entry fields contain the TSC (poll) characters. An ASCII display is presented beside the field.

Select Codes

CDC

These three hex entry fields contain the CDC (select) characters. An ASCII display is presented beside the field.

CDC (Group)

These three hex entry fields contain the Group CDC (also known as the *CDC 2*) characters. An ASCII display is presented beside the field.

CDC (Net)

These three hex entry fields contain the Net CDC (also known as the *CDC 3*) characters. An ASCII display is presented beside the field.

CDC (Aux)

These three hex entry fields contain the Auxiliary Port CDC (also known as the *CDC 4*) characters. An ASCII display is presented beside the field.

IBM 3270

The **Communications Options** enable your system to connect to the host network. The following instructions for IBM 3270 explain each field and list possible variables. The **IBM 3270 Protocol Communication Options** dialog box is organized into two groups: *Protocol Settings* and *Device Definitions*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The screenshot shows a dialog box titled "IBM 3270 Protocol Communication Options". It is divided into two main sections: "Protocol Settings" and "Device Definitions".

Protocol Settings:

- Control Unit: 00
- Turn Delay: 10
- Busy Resp: Rvi
- Not Ready Resp: Tot
- CRT Status Sense: No
- PRT Status Sense: No

Device Definitions:

- Unit Id: 01
- Device Type: Crt
- Device Addr: 00

At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 2.11 IBM 3270 Protocol Communications Options Dialog Box

Protocol Settings

This group of fields defines the Host protocol settings.

Control Unit Id

This field states the 3270 Control Unit Address number. It ranges from 0 to 31.

Turn Delay

This field states how long the interface will delay a protocol response (measured in milliseconds). This prevents responses from being delivered too quickly to the Host computer, and is required for some constant carrier communications lines.

Busy Resp

This field states the response that should be sent to the Host computer when the Communications Interface is temporarily busy and cannot accept a message.

The values for this field are shown below.

Tot

Time out (i.e., no response)

Rvi

Send a reverse Interrupt

Nak

Send a negative acknowledgement

Wak

Send a wait before acknowledgment

Not Ready Resp

This field states the response that should be sent to the Host computer when the Communications Interface is unable to accept a message. The valid values for this field are shown below.

Tot

Time out (i.e., no response)

Rvi

Send a reverse Interrupt

Nak

Send a negative acknowledgement

Wak

Send a wait before acknowledgment

CRT Status Sense

This field states whether or not a device defined as a display (CRT) will send asynchronous status and sense messages such as “Device End”.

PRT Status Sense

This field states whether or not a device defined as a printer (PRT) will send asynchronous status and sense messages such as “Device End”.

Device Definitions

This group of fields defines the host device definition settings.

Unit Id

This value states which physical address (ranging from 1 to 20) is being configured.

Device Type

This field states the type of device (**Crt** for display screen, **Prt** for printer) that is being configured at the unit ID.

Device Addr

This field states the 3270 device address that is being configured at this unit ID. Range is 0 to 31.

InfoConnect

The **Communications Options** enable your system to connect to the host network. The following instructions explain for InfoConnect each field and list possible variables. The **InfoConnect Communications Options** dialog box is organized into three groups: *Session Controls*, *Host Logon Controls*, and *User Logon Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The screenshot shows the 'INFOCONNECT Communications Options' dialog box. It is organized into three main sections:

- Session Controls:**
 - Path:** A text field containing 'DMXCTASK'.
 - Framing:** A dropdown menu showing 'UTS'.
 - Keep Alive Time:** A text field containing '120'.
 - Msg Wait on Startup:** A checked checkbox.
- Host Logon Controls:**
 - Options:** A dropdown menu showing 'AUTO'.
 - Data:** A text field containing '\$\$OPEN LEMS'.
- User Logon Controls:**
 - Options:** A dropdown menu showing 'NAME'.
 - Data:** A text field containing 'OPEN W'.

At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Figure 2-12 InfoConnect Communications Options Dialog Box

Session Controls

This group of fields defines the Session Controls Group.

Path

This field identifies the one- to eight-character path name. This entry must match a path defined in the InfoConnect configuration.

Keep Alive Time

The time (in seconds) between packets that are sent to verify end-to-end communications.

Framing

This field states the framing strategy to be used. The values are shown below.

UTS

Appear as a normal UTS device.

EXT

Appear as a generic device with an extended header describing the message length.

Msg Wait on Startup

Defines whether or not an automatic “Message Wait” function will be issued to the host.

Host Logon Controls

This group of fields defines the Host logon controls.

Options

This field defines the action for the automatic Host logon. Valid values are:

NONE

No logon.

AUTO

Send logon as soon as session is established.

Data

This field defines the actual data string to be sent for the Host logon.

User Logon Controls

This group of fields defines the user logon controls.

Options

This field defines the action for the automatic user logon. Valid values are:

NONE

No logon.

AUTO

Send logon as soon as session is established and the Host logon (if defined) has completed.

NAME

Send logon as soon as the user has entered his/her name from the logon screen, and the Host logon (if defined) has completed.

Data

Defines the actual data string to be sent for the host logon. The string may have embedded a special character “\” (backslash) followed by a character value to insert data elements as follows:

\u

Insert user name, exactly as entered, with no case modification.

\U

Insert user name, with all characters set to upper case.

Poll/Select

The **Communications Options** enable your system to connect to the host network. The following instructions for Poll/Select explain each field and list possible variables. The **Poll/Select Communications Options** dialog box is organized into two groups: *Protocol Settings* and *Addressing*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

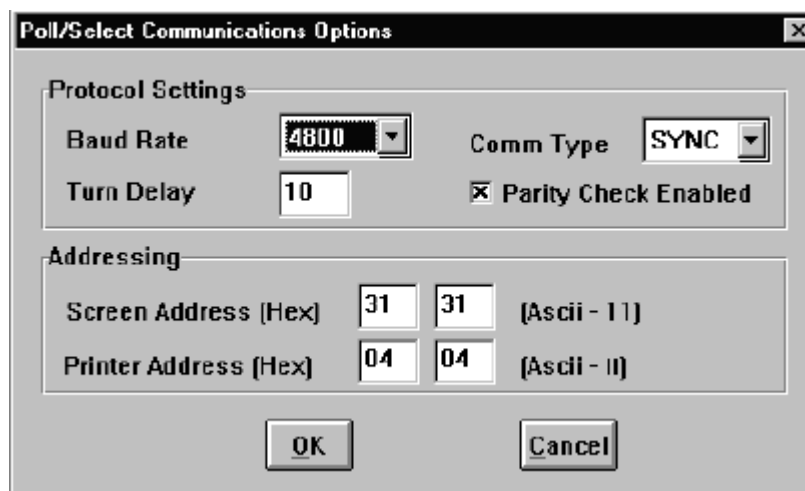


Figure 2.13 Poll/Select Communications Options

Protocol Settings

This group of fields defines the Host protocol settings.

Baud Rate

This field is used to set the line speed for the communications line to the Host.

The valid values for this field are shown below.

110, 150, 300, 600, 1200, 1800, 2400, 4800, 9600, 19200

Comm Type

The value entered in this field determines the type of communications between the workstation and the Host. The valid values for this field are shown below.

SYNC

Synchronous communications

ASYNC

Asynchronous communications

A-TDI

Asynchronous communications via the TDI interface

Turn Delay

This field indicates the amount of time the communications function should wait before raising the “Request to Send” signal and seeking a “Clear to Send” indication. It is used on lines that have constant “Clear to Send” indicators to prevent the communications line from responding before the Host computer is ready. The time is displayed in milliseconds. The range for this setting is from **0** to **500**. Ten (10) milliseconds is the usual and customary setting.

Parity Check Enabled

This checkbox indicates the level of parity checking which will be applied to received messages. The two states for this checkbox are:

Checked

Specifies parity checking will be applied to every received character.

Unchecked

Specifies parity checking should not be applied to every received character, and a single parity error is to be ignored and the character accepted.

Addressing

Screen Address (Hex)

These two fields allow you to enter the first and second characters of the screen device poll code (address) in hexadecimal format. The hexadecimal code entered will be converted and displayed in ASCII text to the right of the field.

Printer Address (Hex)

These two fields allow you to enter the first and second characters of the printer device poll code (address) in hexadecimal format. The hexadecimal code entered will be converted and displayed in ASCII text to the right of the field. If an addressable printer is not used, these fields should be set to the value of **04**.

X.25 PAD

The **Communications Options** enable your system to connect to the host network. The following instructions for X.25 PAD explain each field and list possible variables. The **X.25 PAD Communications Options** dialog box is organized into one group: *Host Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

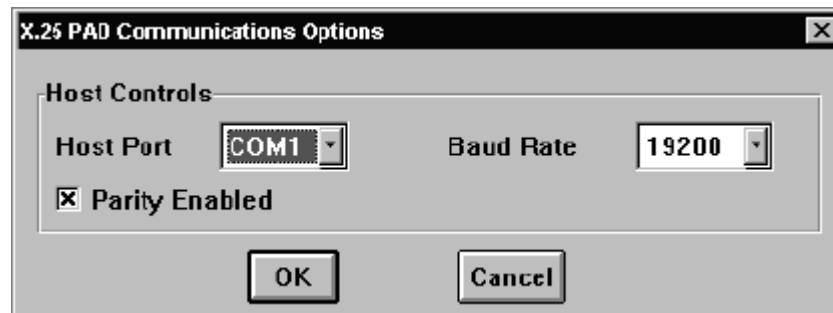


Figure 2.14 X.25 PAD Communications Options Dialog Box

Host Controls

This group of fields defines the Host controls.

Host Port

This field indicates which Communications (COM) port is to be used for the Host connection. The valid values are **COM1** through **COM8**.

Baud Rate

This field has the Host port communications baud rate. Values range from **110** to **19,200** baud.

Parity Enabled

If enabled, parity checking will be used on each character, with seven (7) data bits. If disabled (unchecked), no parity will be used with eight (8) data bits.

Multi-Host

The **Communications Options** enable your system to connect to the host network. The following instructions for Multi-Host explain each field and list possible variables. The Multi-Host communication interface operates by assigning a two-character alphanumeric code to each interface. This code is passed by the application, and indicates which interface will handle the data message. Return messages have the routing code embedded so that the correct target for the message can be determined. The **Multi-Host Communications Options** dialog box is organized into one group: *Host Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box. The **Cancel** button closes the dialog box without saving changes. The user may display all the currently configured routing codes by clicking the **Show** button.

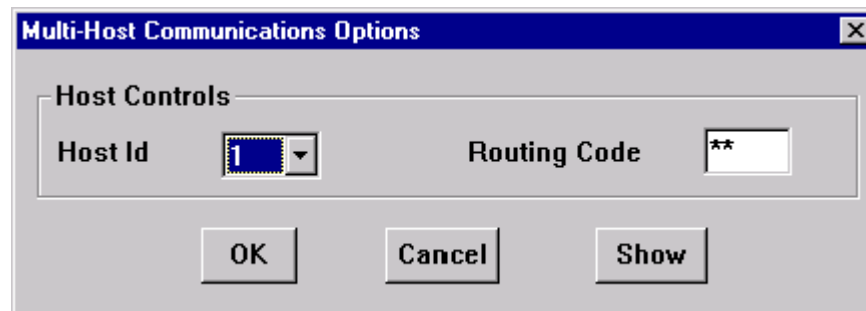


Figure 2.15 Multi-Host Communications Options

Host Controls

This group of fields defines the Host controls.

Host Id

This drop-down field provides a list of numbers from 1 to 64 which indicates the routing interface number and its routing code to be displayed.

Routing Code

This edit box allows for the entry of a two (2) character alphanumeric routing code. If the entry is not used, “**” is displayed.

3 USER INTERFACE SETUP

Chapter 3 explains how to use the options in the **User Interface Configuration** application to configure specific LINXX-2010 features to complement your organization's work environment.

This chapter describes the following:

- Opening the program
- Using the User Interface Setup
- System Options
- Data Handling Options
- Printer Options
- Data Strings

Getting Started

For Windows NT or Windows 95 and above, to configure the User Interface, locate the configuration program at **Start | Programs | LINXX-2010 | User Interface Setup**. The User Interface Configuration screen is displayed as shown below in Figure 3.1.

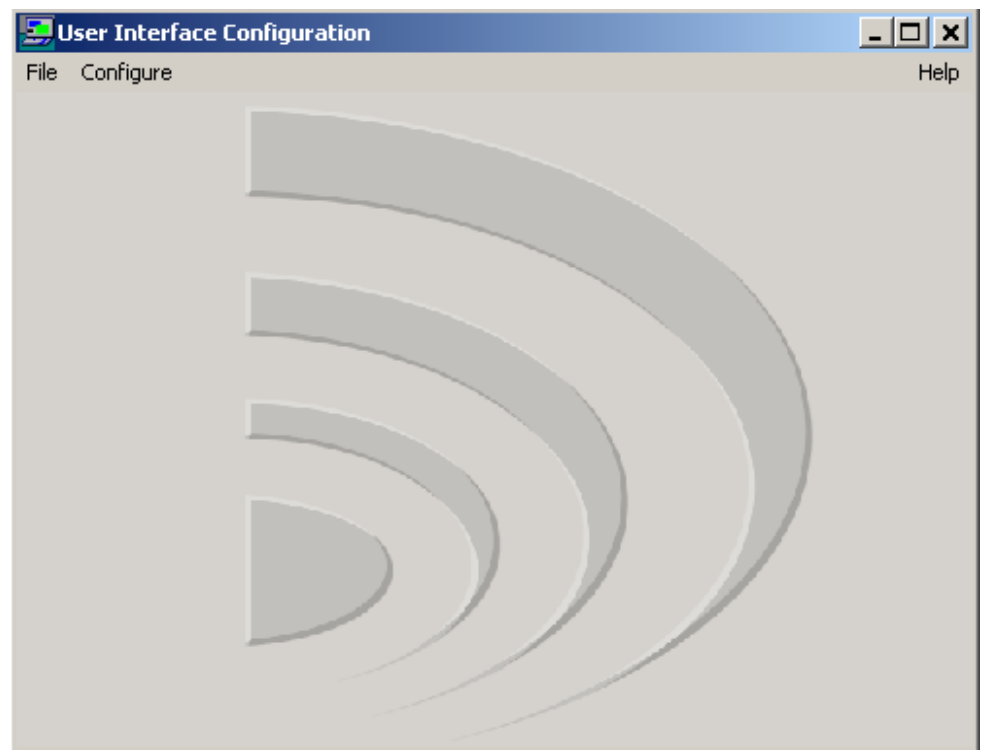


Figure 3.1 User Interface Configuration Screen

Click **Configure** on the menu bar and a list of menu items will be displayed: **Interface Options**, **Data Handling Options**, **Printer Options**, and **Data Strings**.

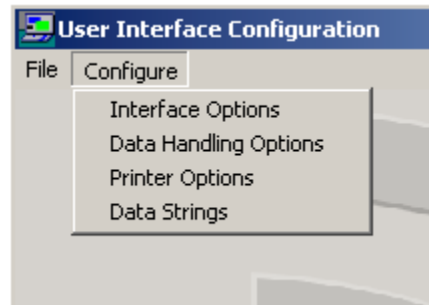


Figure 3.2 User Interface Setup Configure Menu

The first time you attempt to access these menu items, the Configuration Password dialog box is displayed prompting the user to enter an eight (8) character password.



Figure 3.3 Configuration Password Dialog Box

If a password has been set by your system administrator, type it in and click **OK**. Some states may have a password preconfigured in the software. If no password has been set, click **OK**.

Interface Options

Interface Options is the first item in the **Configure** menu. The dialog box for **Interface Options** allows the user to setup configurations, shutdown passwords, assign agency designators, and define an agency profile.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The dialog box is divided into groups of fields. There are three groups in the **Interface Options** dialog box: **Passwords**, **Agency Designators**, and **Agency Profile**.

The screenshot shows the 'Interface Options' dialog box. It is organized into three main sections. The 'Passwords' section at the top has two text input fields labeled 'Configuration' and 'Shutdown'. The 'Agency Designators' section in the middle has two text input fields labeled 'ORI Code' and 'Mnemonic', and a checkbox labeled 'Suppress Preload ORI'. The 'Agency Profile' section at the bottom has several text input fields: 'Name' (which contains the text 'USPIS'), 'Address 1', 'Address 2', 'Address 3', 'Phone #' (with a masked format like '(XXX) XXX-XX'), 'Fax #' (with a masked format like '(XXX) XXX-XX'), and 'Signature'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Figure 3.4 Interface Options Dialog Box

Passwords

Passwords must be eight characters and may include a combination of numbers, spaces, and upper and lower case letters.

Password checking is *case sensitive*; meaning the password must be entered exactly as it was assigned. For example, if the password is “Datamaxx”, the user must enter a capital “D” and lower case “atamaxx”. It is a good idea to write down the passwords you use and keep them in a safe place. Also, keep passwords standard in relation to case. The user must decide whether all passwords are either upper or lower case for consistency’s sake. This makes the password easier to remember. Keep in mind, if you assign a password that is less than eight characters, the computer will automatically insert spaces randomly to complete eight characters and your password may not work. If you wish to pad the password with spaces, insert them into the password yourself instead of letting the computer decide where the spaces are to be placed.

Configuration

Set an eight (8) character password in this field to protect the CommTASK Setup program from unauthorized access.

Shutdown

Assign an eight-character password in this field to protect LINXX-2010 from being shut down without authorization.

Agency Designators

The fields in this group allow you to change your workstation mnemonic and ORI.

ORI Code

Enter your agency ORI in this field.

Mnemonic

Enter your workstation mnemonic in this field.

Suppress Preload ORI

If enabled (checked), your agency ORI will not automatically be loaded into LINXX-2010 transaction forms.

Agency Profile

The fields in this group allow you to set agency information in the LINXX-2010 system.

Name

Enter your agency name in this field.

Address 1

Enter your agency street address in this field. You may use the following two address fields to complete your address. Please include city, state, and zip code.

Address 2

Use this field to complete the address field above or enter an alternate mailing address. This may be a post office box, including the city, state, and zip code.

Address 3

Use this field to complete the above address fields or enter an alternate mailing address. This may be a post office box, including the city, state, and zip code.

Phone #

Enter your agency telephone number in this field, including the area code.

Fax #

Enter your agency facsimile number in this field, including the area code.

Signature

Enter your agency's signature in this field.

Data Handling Options

Data Handling Options is the second item in the **Configure** menu. The dialog box for **Data Handling Options** allows the user to setup data controls, configure case control, transmit and process controls.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The settings in this dialog box are preset. You do not need to make any changes to start working in LINXX-2010. The parameters in the **Data Handling Options** dialog box are grouped into five categories: **Data Controls**, **Case Controls**, **Transmit Controls**, **Process Controls**, and **Local Drive**.

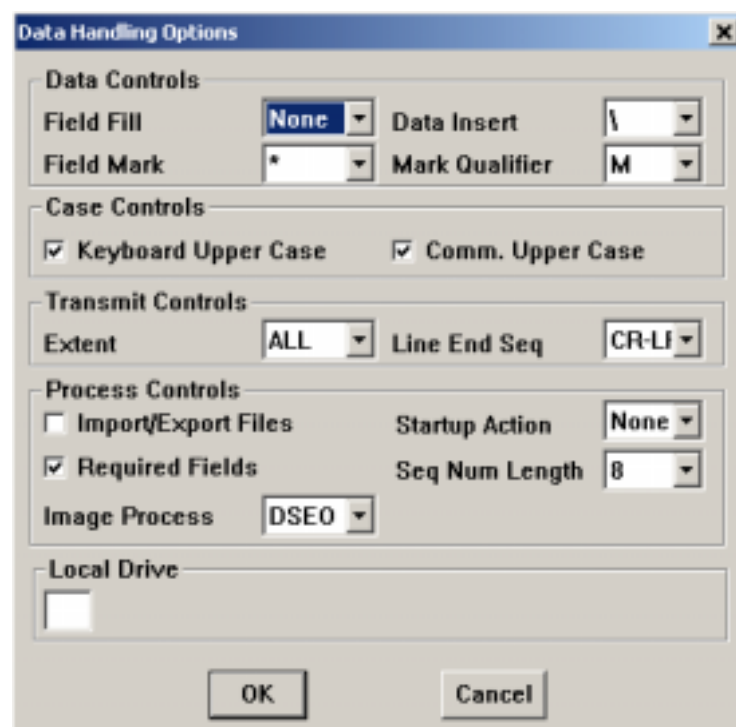


Figure 3.5 Data Handling Options Dialog Box

Data Controls

The fields in this group define control characters used in forms.

Field Fill

This field defines the character used to extend a field to its full length.

Field Mark

This field defines the character that may be placed in a data field to “mark” that field for processing by the central system. This character will override any edits on that field. When the form or message is transmitted only the original data in that specific field is changed.

Data Insert

Use this parameter to define characters designating data in forms or macros. When you use **Data Insert**, predefined data strings are automatically inserted into the form. The default (\) is used before inserting the data string characters. The following table shows a list of the sample data that may be inserted and their corresponding command letters.

Command Letter	Inserts
O	Operator Name
T	Time as HH:MM
R	Time as HHMM
Z	Time Zone
D	Date as MM-DD-YYYY
C	Date as MMDDYYYY
G	Date as MM/DD/YYYY
A	Agency ORI Code
N	Terminal Network Name (Mnemonic)
M	Current Message Sequence Number
Y	Last 2 Digits of Current Year
H	Current Month as Number
W	Current Day of the Month as Number
Un	User-defined String “n”, where “n” is the String Identification Character

Mark Qualifier

This field sets the first character of the message key code as defined in a form. It must be present to activate the edit function in a given form.

Case Controls

Keyboard Upper Case

Check this box to force upper-case letters during data entry, regardless of the keyboard CAPS LOCK setting.

Comm. Upper Case

Check this box to send upper-case letters to the communications handler, regardless of how the letters were entered.

Transmit Controls

Extent

This field selects the extent of the message when transmitting from the message window. The values for this setting are:

ALL

When this option is set, the extent of a transmitted message will be from the message marker immediately above the data (where the cursor is located) to the message marker below the data. If there is not a message marker below the data, all of the data after the last message marker will be transmitted.

CURS

When this option is set, the extent of a transmitted message will include the data between the previous message marker and the cursor location.

Line End Seq

This option defines the characters to send to the network at the end of each line of data. The selections for this option are:

CR-LF

This option adds a carriage return and line feed character at the end of each line of data sent to the network.

LF

This option adds a line feed character at the end of each line of data sent to the network.

CR

This option adds a carriage return character at the end of each line of data sent to the network.

NONE

This option adds no character or carriage return at the end of the line.

Process Controls**Import/Export Files**

If left blank, text from files is not exported either to or from LINXX-2010. Cut, copy and paste functionality is not affected by this setting.

Startup Action

This field allows you to choose how LINXX-2010 will appear after a user starts LINXX-2010 and completes the sign-on procedure. The selections for this setting are listed and described below.

NONE

When LINXX-2010 is started, the main window appears and no message windows or form windows will be open.

MSG

When LINXX-2010 is started, the message window which was open when LINXX-2010 was last closed will appear in the main window.

ALL

When LINXX-2010 is started, both message windows and form windows which were open when LINXX-2010 was last closed will appear in the main window. Any forms displayed will contain data from the previous session.

Required Fields

If this box is activated (checked), a user will not be able to TAB out of an empty required field. The field must be completed before the user can continue filling out the form.

Seq Num Length

This field defines the length of the automatically inserted message sequence number.

Image Process

This field defines the protocol used for image processing. The selections for this option listed are:

DSEO

This option provides support for the Datamaxx Standard Embedded Object and is the current Datamaxx standard used for image processing.

NCIC

This option provides support for the National Crime Information Center image processing standard.

USBO

This option provides support for the Unisys Binary Object standard for image processing.

MFC

This option provides support for the Datamaxx Legacy standard for image processing.

HOST

This option provides support for non-standard image processing standards. A compatible communications driver may be required for compatibility.

NONE

This option provides no image processing support.

Local Drive

This field sets the page swap file drive where transient files, such as temporary message windows are stored. This is primarily intended for a LAN environment, where a drive letter for another location may be specified (e.g. G, K, etc.). If left blank, the drive will default to the local drive where the DMX directory is located.

Printer Options

Printer Options is the third item in the **Configure** menu. The fields in the **Printer Options** dialog box define how print commands in LINXX-2010 will function. The settings in this dialog box are grouped into two categories: *Message Printing Controls* and *Screen Print Controls*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

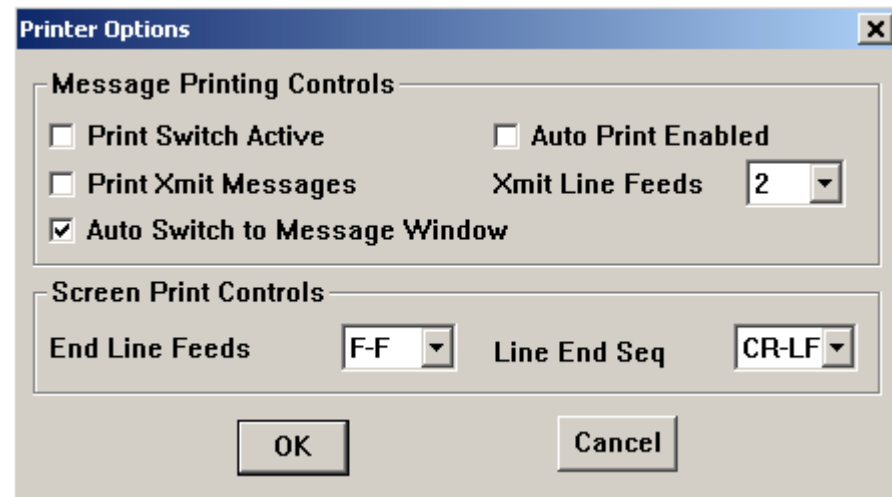


Figure 3.6 Printer Options Dialog Box

Message Printing Controls

Print Switch Active

If this option is activated (checked) along with **Auto Print Enabled**, the user may control automatic message printing from LINXX-2010. Check this box if you want users to be able to switch the automatic printer on and off. If this box is not checked, the printer acts on the **Auto Print Enabled** setting.

Auto Print Enabled

If this option is checked, automatic printing is enabled and network messages will be printed automatically. If this option is not checked, network messages will not be printed automatically.

Print Xmit Messages

If this option is checked, messages sent from the workstation will be printed automatically, as long as the printer is enabled.

Xmit Line Feeds

This field allows the user to set the number of lines the printer paper scrolls forward after a transmitted message prints. The options for this field are listed and described below.

0

No line feed after a transmitted message is printed.

0-60

The number of printer line feeds the printer will scroll forward after a transmitted message is printed.

F-F

No line feed after a transmitted message is printed.

Auto Switch to Message Window

If this option is enabled (checked), a message window will automatically open when a message is received.

Screen Print Controls

End Line Feeds

This field allows you to set the number of lines the printer paper scrolls forward after the user initiates a print command. The choices are:

0-60

This option defines the number of line feeds the printer will scroll forward after a user initiates a print job.

F-F

The printer will activate a form feed after a user initiates a print job.

Line End Seq

This option defines the characters to be used at the end of each printed line. The selections for this option are:

CR-LF

This option adds a carriage return character and line feed character at the end of each line of a printed message.

LF

This option adds a line feed character at the end of each line of a printed message.

CR

This option adds a carriage return character at the end of each line of a printed message.

Data Strings

Data Strings is the fourth item in the **Configure** menu. The dialog box for **Data Strings** allows the user to define up to 72 strings of data that can be used in the creation of transactions. Each data string may include spaces and ASCII characters. A data string is used to include information in a form that is common to many forms. For example, an agency's location may be written as a data string then inserted into a form with a simple command.

To create your own data strings (User Defined Data Strings) see the instructions in this section.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box.

The dialog box is divided into groups of fields. There are two groups in the **Data Strings** dialog box: *String Identification* and *String Definition*.

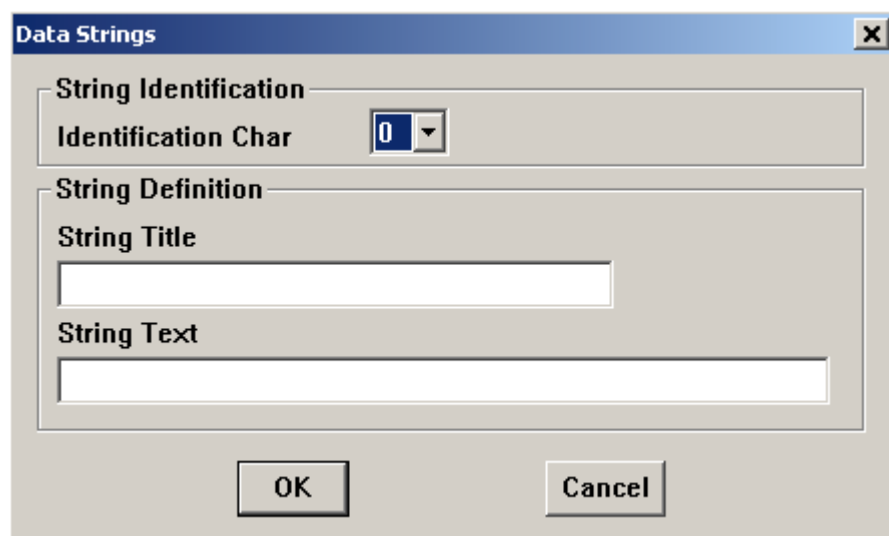


Figure 3.7 Data Strings

String Identification

Identification Char

This field defines the character that identifies the data string when used with the **Insert Data** character “\Un” (“n” being the identification character).

String Definition

String Title

Assign a name to the data string you will create in the **String Title** field. This field is only for identifying the data string.

String Text

Enter up to 80 characters to be used as the data string in a form. You may use spaces, displayable ASCII characters, and \n to insert a new line.

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4 EXTENDED SECURITY SETUP

In this chapter, you will learn how to use the various security features provided in LINXX-2010. Extended Security should be utilized to prevent unauthorized users from accessing operations-sensitive settings and commands. The following topics will be covered in this chapter:

- Setting Security Systems Configuration Options
- Setting Security Systems Operator Identification
- Creating Security Access
- Dissemination Logging

Getting Started

For Windows NT or Windows 95 and above, to configure Extended Security, locate the configuration program at **Start | Programs | LINXX-2010 | Extended Security Setup**. The **Security Setup** configuration screen will be displayed as shown below.

The first time you attempt to access these menu items, a password dialog box will be displayed as shown below.



Figure 4.1 Configuration Password Dialog Box

If no password has been set, click **OK**. If a password has been set, type it in and click **OK**. Some states may have a password preconfigured in the software.

The **Extended Security Application** dialog box is displayed (see Figure 4.2). This dialog box allows the user to set passwords to protect configurations and log archives, protect macros from unauthorized use, and activate certain control options for security.



Figure 4.2 Extended Security Application Dialog Box

Two option tabs are available in the **Extended Security Application** dialog box: *Options* and *Users*.

A brief description of each category and their individual fields is listed and described below. If any changes are made to the configuration, click **OK** to save the changes and close the dialog box. To apply any changes to the *Control Options*, click the **Apply** button.

Options

The passwords you assign in these fields protect sensitive commands within the Security Setup program. Passwords must be eight characters and may include spaces, upper- and lower-case letters and special characters.

Configuration Password

This field allows you to assign a password to protect access to this program. Users must enter this password to access this program.

Enter

This field allows the user to enter an assigned password to this program.

Confirm

This field allows the user to re-enter the assigned password to confirm that the password is correct.

Log Archive Password

This field allows you to assign a password to protect the **Log Archive** command in LINXX-2010. Users must enter this password to access the **Log Archive** command.

Enter

This field allows the user to enter an assigned password to this command.

Confirm

This field allows the user to re-enter the assigned password to confirm that the password is correct.

Macro Update Password

This field allows you to assign a password to protect access to the **Record Macro** command in LINXX-2010. Users must enter this password to access the **Record Macro** command.

Enter

This field allows the user to enter an assigned password to this command.

Confirm

This field allows the user to re-enter the assigned password to confirm that the password is correct.

Control Options

The following options define the security controls that prevent an unauthorized user from gaining access to the LINXX-2010 workstation program.

User Identification Required

Check this box if you want the workstation(s) to require operator identification when attempting to start LINXX-2010. Either the **Identification Required** field or the **Password Required** field must be checked in order for the system to require identification.

User Password Required

Check this box if you want the workstation to require the user to enter his or her user password when the system is started. The **Password Required** field or the **Identification Required** field must be checked in order to set the extended security.

Suppress Windows User Logon

When a user logs on to LINXX-2010, the logon dialog box normally displays the name used to logon to the Windows operating system for the PC. Check this box to hide the Windows logon name, then the user will enter his/her own user name in the LINXX-2010 logon box.

Protect Windows User Logon

When a user logs on to LINXX-2010, the logon dialog box displays the name used to logon to the Windows operating system for the PC. Check this box to prevent a LINXX-2010 user from changing the name in the logon box. If this option is enabled, and the **Password Required** and/or **Identification Required** options are also enabled, the Windows logon name must exactly match a configured user name in the **Operator Identification** configuration.

Maintain Audit Trail

Check this box if you want an audit trail established to record all attempts to access LINXX-2010. The audit trail log will be stored on the system hard disk in the DMXSEC.LOG file.

Automatic Close Timer

This field allows the administrator to set the number of minutes a user may leave the workstation unattended before they are required to log on again. LINXX-2010 will record the time since the last command and automatically log-off the user when the time set in this field has lapsed.

Set the security features you want to invoke, then click **OK** or press ENTER.

Users

This dialog box allows you to set user identification and passwords for individual operators. If **Password Required** is not enabled in the **Extended Security Applications** dialog box, there is no need to set passwords.

The **Users Security** dialog box provides the user with five options: *Add*, *Edit*, *Delete*, *Import* and *Export*.

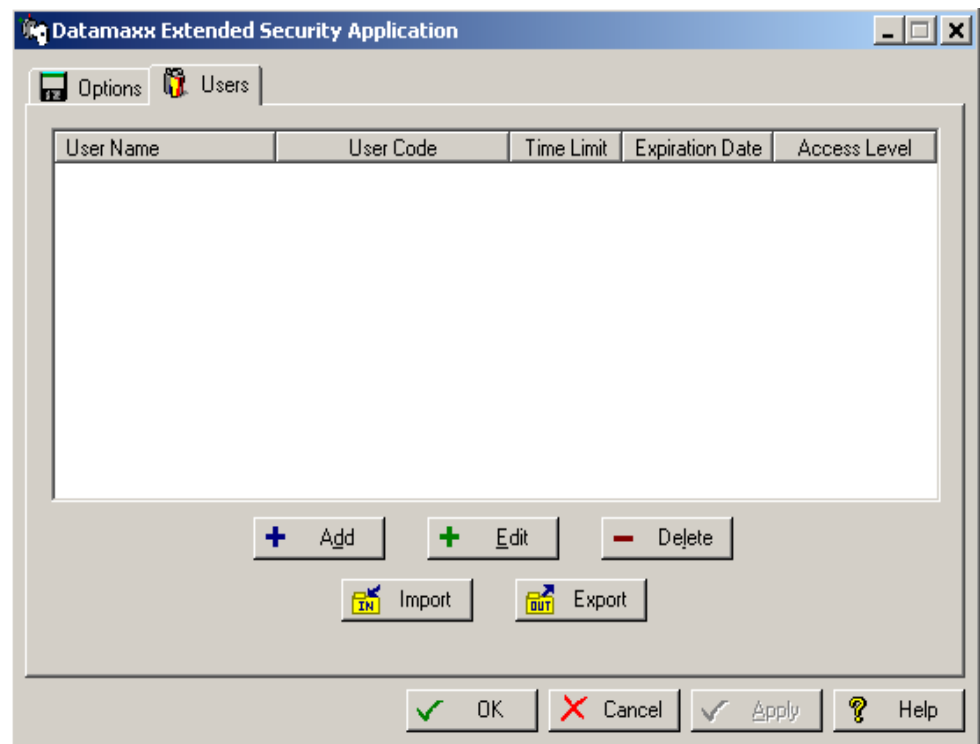


Figure 4.3 Users Security Dialog Box

Add

The administrator may define the *Control Options* for each user in the system. Administrators may define User properties or attributes to ensure that unauthorized users must enter a user name and password before accessing LINXX-2010.

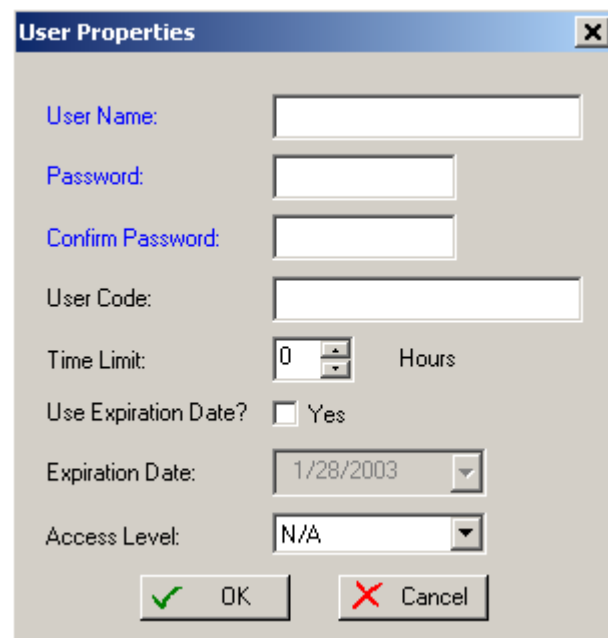


Figure 4.4 User Properties Dialog Box

User Name

Enter the name the user will enter to access LINXX-2010. The system will prompt for the user's name at logon only when the **Identification Required** field is enabled (checked) in the **Extended Security Application** dialog box.

Password

Enter the password the user will enter to access LINXX-2010. This field is set only if the **Password Required** field is checked in the **Extended Security Application** dialog box. User passwords are one to ten characters in length and are case sensitive.

Confirm Password

This field allows the user to re-enter the assigned password to confirm that the password is correct.

User Code

This field allows the administrator to assign a user code that will be checked with the Host computer when a transmission is sent. These codes are assigned by the Control Terminal Agency (CTA).

Time Limit

This field allows the administrator to define the maximum number of hours each user may be logged onto the system. The range is 0 to 18 hours.

Expiration Date

These fields allows the administrator to set the date the user's ID and/or password will expire. If this field is set to **None**, the operator ID and/or password will not expire. Set an expiration date using the month, day and year in the following format: MM/DD/YYYY.

Access Level

This field allows the administrator to set an access level for each user. To set groups of access levels, see the section "*Defining Access Levels*" in this chapter.

Edit

The administrator may make changes to the *User Properties Profile* for each user in the system. Administrators may edit User properties or attributes to ensure that unauthorized users must enter a user name and password before accessing LINXX-2010.

To access a user profile, highlight a name in the list of users and click the **Edit** button as shown below in Figure 4.5.

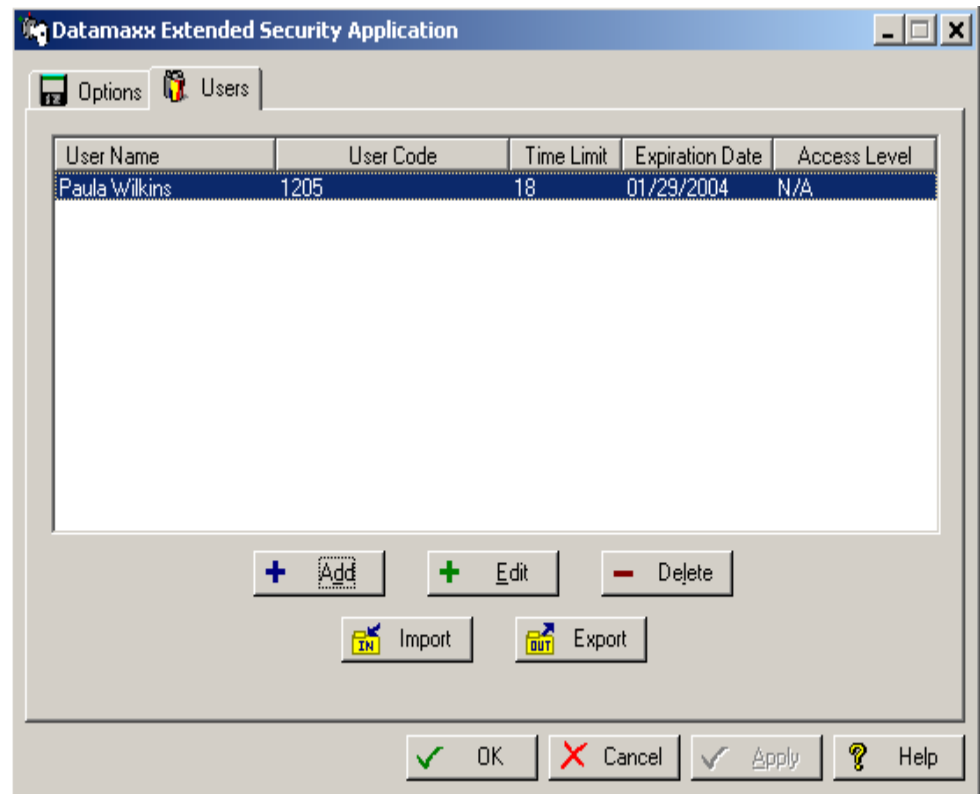
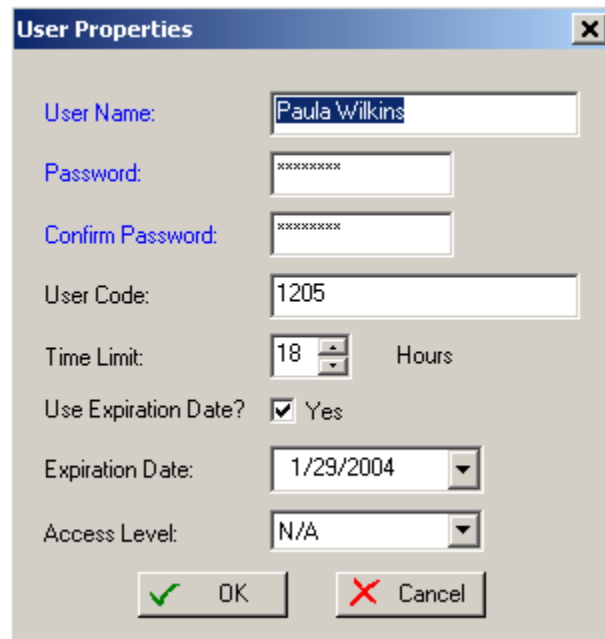


Figure 4.5 Select User Properties

The administrator clicks the **Edit** button to change the properties displayed for a particular user. To save the changes in the user profile, click the **OK** button or click **Cancel** to close the dialog box without saving changes.



The 'User Properties' dialog box contains the following fields and controls:

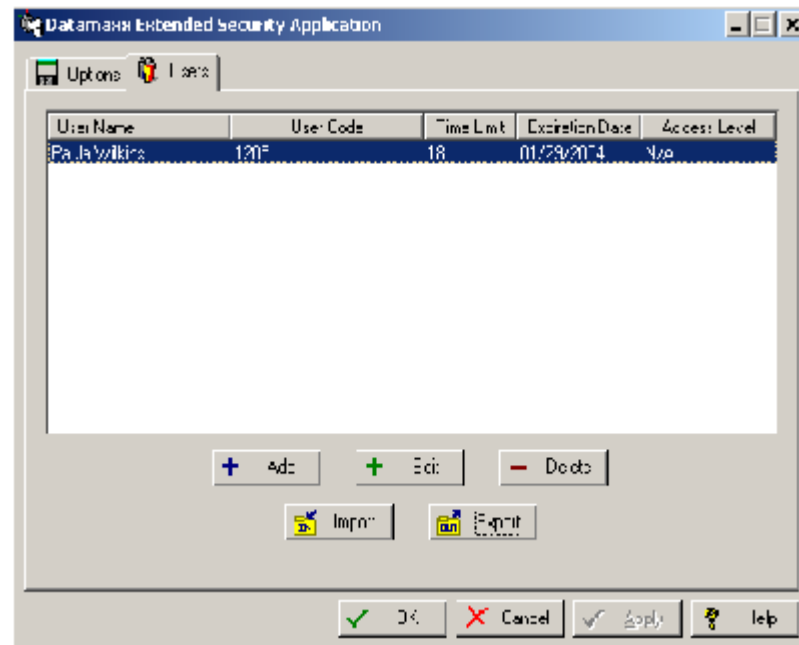
- User Name:** Text field containing 'Paula Wilkins'.
- Password:** Password field with masked characters 'XXXXXXXX'.
- Confirm Password:** Password field with masked characters 'XXXXXXXX'.
- User Code:** Text field containing '1205'.
- Time Limit:** Spin box set to '18' with the unit 'Hours'.
- Use Expiration Date?:** Check box labeled 'Yes' which is checked.
- Expiration Date:** Calendar dropdown showing '1/29/2004'.
- Access Level:** Dropdown menu showing 'N/A'.
- Buttons:** 'OK' (with a green checkmark icon) and 'Cancel' (with a red X icon).

Figure 4.6 Edit User Properties

Delete

The administrator may delete the *User Properties Profile* for a user in the system to ensure that unauthorized users cannot access LINXX-2010.

To delete a user profile, highlight the name in the list of users and click the **Delete** button as shown in Figure 4.7.



The 'Datamaxx Extended Security Application' window displays a list of users and controls for managing them:

User Name	User Code	Time Limit	Expiration Date	Access Level
Paula Wilkins	1205	18	01/29/2004	N/A

Below the table are buttons for '+ Add', '+ Edit', and '- Delete'. At the bottom of the window are buttons for 'Info', 'Export', 'OK', 'Cancel', 'Apply', and 'Help'.

Figure 4.7 Select User Properties

The administrator clicks the **Delete** button to remove the user from the LINXX-2010 system. If the administrator clicks the **Delete** button, a **Delete User** confirmation box is displayed to confirm the deletion process.

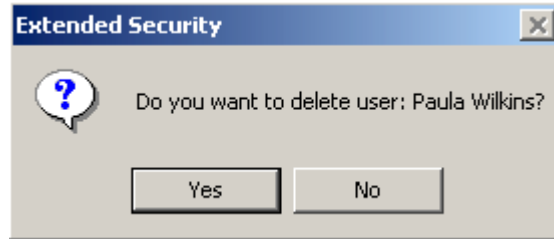


Figure 4.8 Delete User Confirmation Box

Note the user is deleted from the LINXX-2010 database. To save changes, click the **OK** button or click **Cancel** to close the dialog box without saving changes.

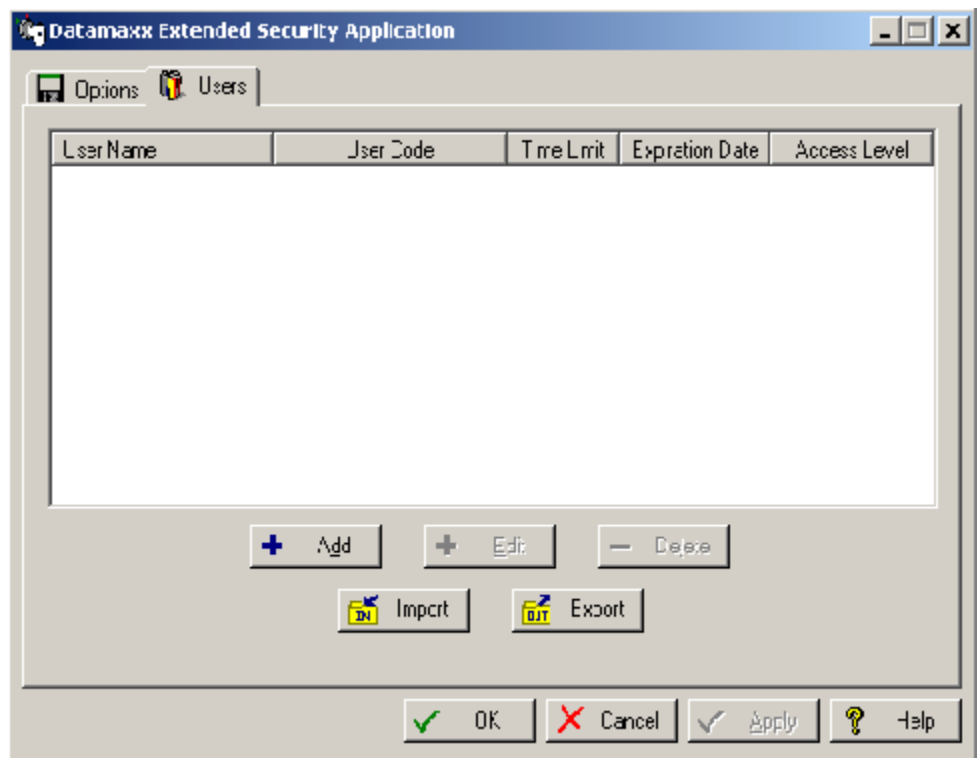


Figure 4.9 Deleted User Properties

Import

The administrator may import a user profile from an outside source by clicking the **Import** button. The Import Users dialog box is displayed allowing the administrator to browse other directories for user profiles.

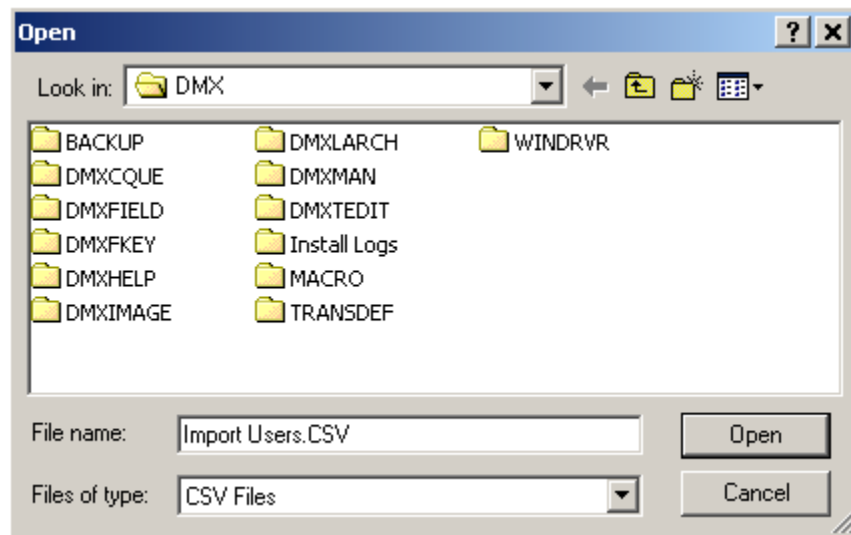


Figure 4.10 Import Users Dialog Box

Export

The administrator may export a user profile from within LINXX-2020 by clicking the **Export** button. The **Export Users** dialog box is displayed allowing the administrator to place user profiles in other directories.

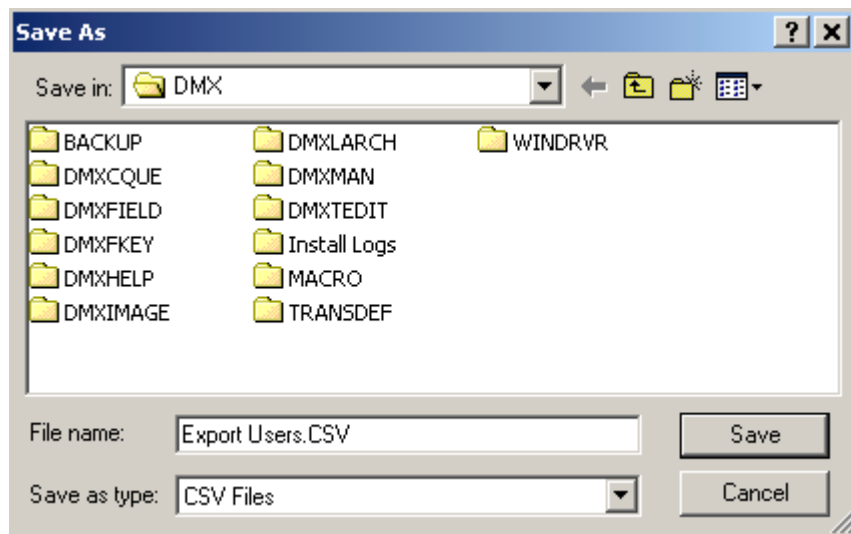


Figure 4.11 Export Users Dialog Box

Why Security Should Be Set

What could happen if you do not provide system security? This section explains the purpose for providing security on specific LINXX-2010 operations and programs.

Configuration Setup Programs

Passwords that protect the configuration (setup) programs, User Interface Setup, and Communications Task Setup are defined within each program, respectively. If the Communications Task Setup program is altered by an unauthorized or untrained user, the network communications could be taken off-line. Likewise, if the User Interface Setup program is modified by an unauthorized user, the workstation could be disabled completely or put into an inoperable mode. Correcting this type of misuse may be time consuming, not to mention the inconvenience of downtime. For these reasons, it is important to protect both the User Interface Setup and Communications Task Setup programs. When a user attempts to access a setup program, a password is requested even if no password has been defined for that user. However, this alone should not be considered enough of a deterrent. The best course of action is to take the time to set passwords for *each* of the configuration setup programs.

Extended Security Setup

Protecting this program from unauthorized use helps maintain the integrity of security controls. If this program is modified by an unauthorized user, LINXX-2010 may become unsecure or users may be “locked out” of the program. It is imperative to secure this program with a password.

Log Archive

Protecting this utility with a password prevents users from accessing the message log archive utility and possibly archiving an existing message log.

Macro Update

Protecting this utility with a password prevents users from creating macros that may not be in compliance with transaction rules mandated by the Control Terminal Agency (CTA).

Retaining Passwords

If passwords are used to establish security, steps must be taken to ensure that the passwords are retained in the LINXX-2010 database. In the event of a lost or forgotten password, Datamaxx does not provide a method for circumventing the password security system. The only remedy available is to reinstall the system.

Transaction Authorization

A Transaction Authorization file (DMXTAUTH.CTL) consists of brief comment and/or command lines for all transactions your organization uses and the access level for each. Contents of this file are network dependent.

DMXTAUTH.CTL is used to determine which groups of users has authorization to access different transaction forms. The DMXTAUTH.CTL file is an ASCII file that may be created in any text editor program (e.g. Windows Notepad). Commands in this file consist of three items (in order):

1. The 1- to 32-character transaction code (i.e., “CW” for a Cancel Warrant transaction) followed by a comma.
2. The minimum data length of the transaction followed by a colon.
3. The two-character numeric access level(s), separated by commas (or the word “ALL” to allow all users to have access). These access levels correspond to the access levels set in the **User Code** for each user. See the “*Access Levels*” section for further detail on defining access levels.

To create the transaction authorization file:

1. Using a text editor program (e.g. Windows Notepad), enter a command line. Press ENTER to move to the next line.
2. Continue adding comments and commands until every transaction that requires an authorization has been entered.
3. Save the transaction authorization file in the DMX directory and name it DMXTAUTH.CTL.

Below is an example of a DMXTAUTH.CTL file in Windows Notepad:

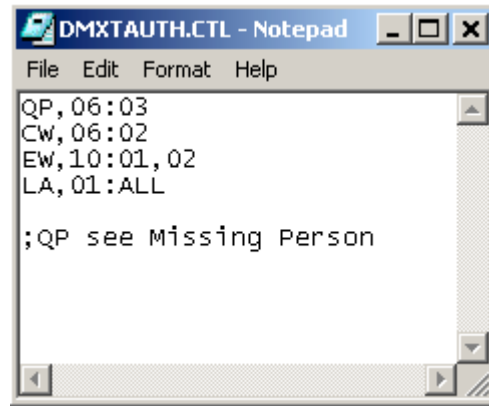


Figure 4.12 DMXTAUTH.CTL File

- In Figure 4.12, the QP transaction (Query Part) with a minimum data length of 6 characters may be run by all users configured with the “03” access level.
- The CW transaction (Cancel Warrant) with a minimum data length of six (6) characters may be run by all users configured with the “02” access level.
- The EW transaction (Enter Warrant) with a minimum data length of 10 characters may be run by all users configured with the “01” and “02” access levels.
- The LA transaction (Locate Article) with a minimum data length of one (1) character may be run by all users.

Note that a user with the “02” access level can run CW and EW transactions in the example, but a user with the “01” access level can only run the EW transaction.

The comment line is optional and can state whatever is required by the user; however, there must be a semicolon (;) before the comment so the comment is “read” by LINXX-2010 causing an error.

Access Levels

The purpose of creating access levels is to protect specific transactions from unauthorized users. Each user may be assigned an access level in the **User Code** field located in the **User Properties** dialog box. When a transaction is accessed by an unauthorized user, LINXX-2010 displays a warning message: “Unknown or Unauthorized Transaction” and the user is not allowed to submit the transaction.

The steps for creating access levels are:

- Defining access levels
- Creating a transaction authorization file (DMXTAUTH.CTL)

Defining Access Levels

An access level is the authorization that allows a user to submit specific transactions. For example, an access level of “1” may be defined for users who submit NCIC transactions only. The administrator should determine the access levels of all users in your organization, based on the transactions they need to access. You may define up to 80 access levels (1 to 80) and an access level of ALL, meaning a user has permission to use *all* transactions.

Assigning Authorization Levels

Grouping individual users makes assigning authorizations easier and more organized. First, determine in which groups users belong according to their authorization level. Second, you must determine the transactions each group should be authorized to access. Assigning authorization access to groups is covered in the section “*Creating the Transaction Authorization File*”.

To assign individual users to groups:

1. For Windows NT or Windows 95 and above, locate the configuration program at **Start | Programs | LINXX-2010 | Extended Security Setup**. The **Extended Security Application** dialog box is displayed.
2. Click the **Users** tab and highlight the user with your mouse, or double-click the user name.

3. Click the **Access Level** drop-down list as shown in Figure 4.13.

The image shows a 'User Properties' dialog box with the following fields and options:

- User Name:** Paula Wilkins
- Password:** [Redacted]
- Confirm Password:** [Redacted]
- User Code:** 1205
- Time Limit:** 18 Hours
- Use Expiration Date?** ☒ Yes
- Expiration Date:** 1/29/2004
- Access Level:** Group 8 (The drop-down list is open, showing options: N/A, All, Query, Group 3, Group 4, Group 5, Group 6, Group 7, and Group 8, with Group 8 selected at the bottom.)

At the bottom left of the dialog box is a green checkmark icon and the text 'OK'.

Figure 4.13 Access Level Drop-down List

The following list are settings that you may apply to individual users or you may assign a user to a previously defined group.

N/A	When this access level is defined, the system does not check authorization.
All	May allow users access to all valid transactions. The access level is verified for this access code.
Query	May allow user access only to queries.
Group 3-80	May group individual users into numbered groups.

Dissemination Logging

Dissemination Logging is used to track messages in an organized manner by designating the types of logs to be tracked. LINXX-2010 can also designate a specific recipient for the logs. The main advantage to a dissemination log over a regular log is the dissemination log cannot be reset automatically like a regular log. Once you designate where you want that log stored, it remains there until YOU take it off your system.

Using dissemination logging, LINXX-2010 can be configured to track specified messages, while it records the message and tracking information in a file. Along with the outgoing message text, information about the workstation, operator, ORI, time, date, and intended recipient of the returned data is tracked. Dissemination logging is provided through two different mechanisms: the dissemination log control file and as it is defined within a form definition file. Dissemination log files reside in the DMX directory and are named DMXALOG.???, where ??? may be any three characters. Form definition files reside in the DMXFKEY subdirectory within the DMX main directory and are named according to their specific MFC acronym.

Control File

Dissemination logging is controlled through the DMXTRNLG.NDX file. This file creates logs of transmitted messages and forms. Each line of this file has the format:

<message key>,<extension>,
or
<message key>,<extension>,r

For example:

QH,CHI,
or
QH,CHI,r

The message key defines the message log and may have questionmarks (?) as wildcards to match any one character. The extension defines the file extension to use with the DMXALOG.??? filename when writing the log, and the “r” is an optional flag that requires the operator to be queried for recipient information. Notice two important features this option provides: many message types may be logged to one file (Q?, Q, r - logs all messages which have two-character keys beginning with Q), and if “r” is not specified, the operator is unaware that message logging has occurred.

Creating the Control File

1. Open the text editor (e.g. Windows Notepad).
2. In this file, type the message key of the transaction you wish to log followed by a comma and the extension (three (3) characters maximum length) for the file extension of the log file. LINXX-2010 will automatically create this file based on the extension you provide. For example, use “CHI” to denote transactions that deal with criminal histories.

An “r” can be placed at the end of this line to prompt the operator to name a recipient for this logging information. The “r” is optional. If the “r” is added, before the transaction is transmitted, the operator will have to fill out the **Enter recipient data** dialog box:



Figure 4.14 Enter Recipient Data Dialog Box

3. Save the file as DMXTRNLG.NDX to the DMX directory.
4. If the LINXX-2010 application is currently running, exit LINXX-2010, **but leave the CommTask running!**
5. Open LINXX-2010 and logon.
6. Run the type of transaction you wish to log. At the point of transmit, LINXX 2010 will automatically create a file named DMXALOG in the DMX directory, with the extension you provided in the DMXTRNLG.NDX file.
7. Go to Explorer or File Manager. Locate the DMX directory and look for the DMXALOG.??? (where ??? is the extension you provided.) Double-click that file. You may be prompted by Windows to associate the file with a program. Choose whatever text editor you used to create DMXTRNLG.NDX (e.g. Windows Notepad).
8. An entry should appear in the log recording your test transaction from step 6. Figure 4.15 illustrates an example of a dissemination log.

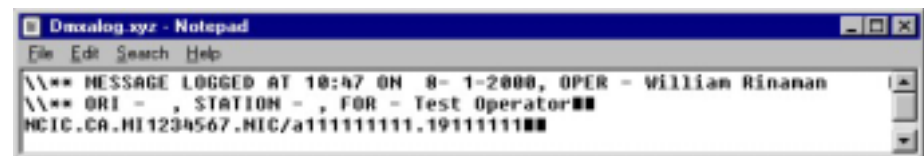


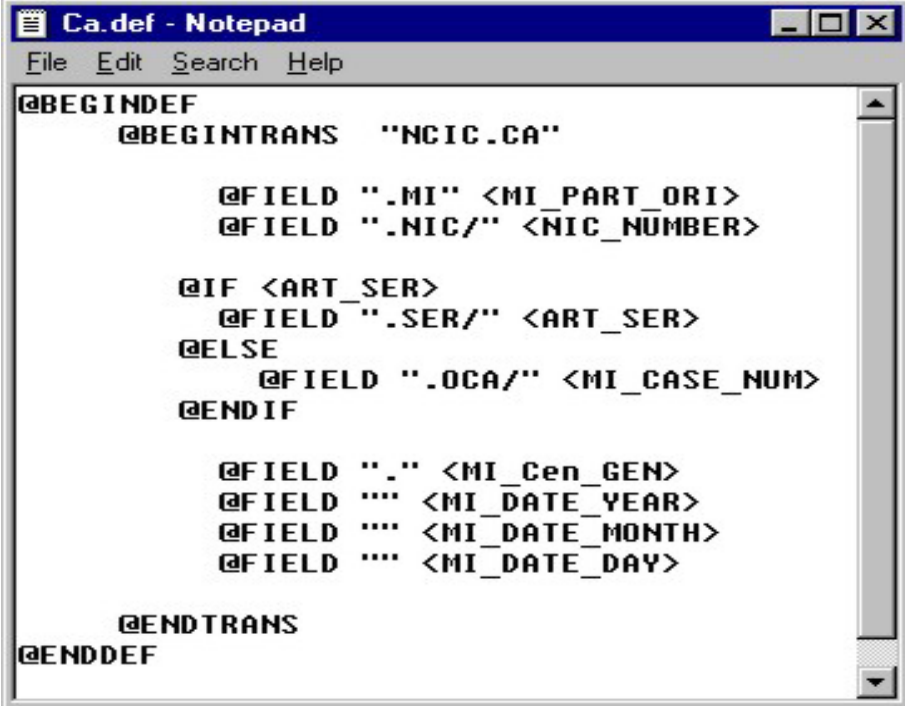
Figure 4.15 Example of Dissemination Log

Dissemination Logging in a Transaction Definition File

Disseminating a log within a transaction definition file requires a text editor (e.g. Windows Notepad) to insert a simple string of instruction. When the form is transmitted, LINXX-2010 will automatically create the dissemination log file according to the instructions in the string. Because the instructions are coded into the transaction, the instructions will not log a transaction in the dissemination file when a free text message is sent. Only when a form is transmitted will there be a record of the transmission in the dissemination log. If you want a log to record all transactions of a particular type, regardless of whether the transaction is a free text message or form, use the steps for building the DMXTRNLG.NDX control file mentioned in the previous section.

To create a dissemination log in a transaction definition file:

1. Access the DMX directory and look in the TRANSDEF subdirectory for the DEF file of the form you wish to edit. For example, the CA.DEF file corresponds to the CA (Cancel Single Article) transaction.
2. Open the .DEF definition file in a text editor (e.g. Windows Notepad). Figure 4.16 is an example of a .DEF file (CA.DEF).



```
@BEGINDEF
  @BEGINTRANS  "NCIC.CA"

      @FIELD ".MI" <MI_PART_ORI>
      @FIELD ".NIC/" <NIC_NUMBER>

      @IF <ART_SER>
        @FIELD ".SER/" <ART_SER>
      @ELSE
        @FIELD ".OCA/" <MI_CASE_NUM>
      @ENDIF

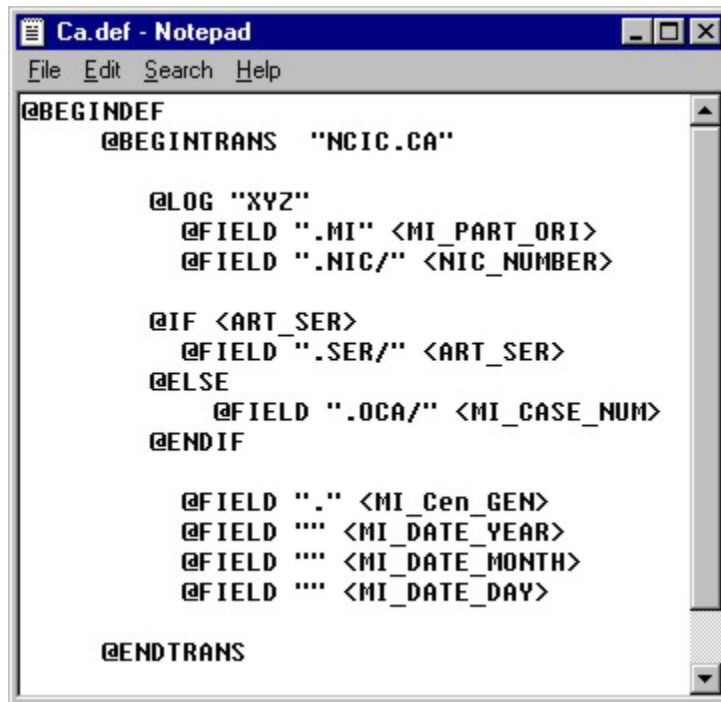
      @FIELD "." <MI_Cen_GEN>
      @FIELD "" <MI_DATE_YEAR>
      @FIELD "" <MI_DATE_MONTH>
      @FIELD "" <MI_DATE_DAY>

  @ENDTRANS
@ENDDEF
```

Figure 4.16 Example of .DEF File

3. Place the cursor anywhere after the @BEGINTRANS command and before the @ENDTRANS command (do not insert the string between fields). The string must start with @LOG<space> and then the letters for the log file extension. You can assign any alpha characters to the extension as long as they are three characters (maximum) in quotations.

Example: @LOG "XYZ"



```

@BEGINDEF
  @BEGINTRANS  "NCIC.CA"

    @LOG "XYZ"
    @FIELD ".MI" <MI_PART_ORI>
    @FIELD ".NIC/" <NIC_NUMBER>

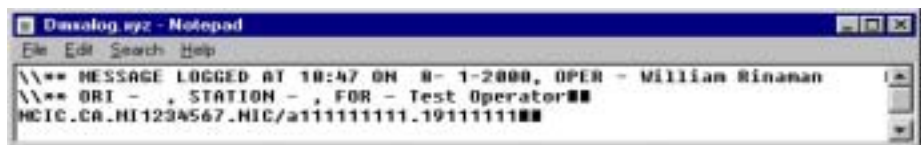
    @IF <ART_SER>
      @FIELD ".SER/" <ART_SER>
    @ELSE
      @FIELD ".OCA/" <MI_CASE_NUM>
    @ENDIF

    @FIELD "." <MI_Cen_GEN>
    @FIELD "" <MI_DATE_YEAR>
    @FIELD "" <MI_DATE_MONTH>
    @FIELD "" <MI_DATE_DAY>

  @ENDTRANS
  
```

Figure 4.17 Example of DEF File with @LOG "XYZ" Added

4. Next, save the form definition file. Test your changes by re-entering LINXX-2010 and transmitting the form you selected. Then return to the DMX directory and look for a file named DMXALOG.??? The question marks represent the three-character extension included in the string. In the example shown above, the extension "XYZ" was used, so the log file will be named DMXALOG.XYZ.
5. Open the log file and verify that the transaction is recorded. Figure 4.18 is an example of a DMXALOG file for the CA.DEF file described in Figure 4.17. The operator is "William Rinaman" and the recipient of the response is "Test Operator."



```

\\** MESSAGE LOGGED AT 10:47 ON 8- 1-2000, OPER - William Rinaman
\\** ORI - , STATION - , FOR - Test Operator##
NCIC.CA.HI1234567.NIC/a111111111.19111111##
  
```

Figure 4.18 Example of DMXALOG File

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5 PROGRAMMING LINXX-2010

Chapter 5 describes the system programming functions of LINXX-2010. Some of these functions are not provided within the LINXX-2010 program interface, nor are they contained within any of the LINXX-2010 configuration dialog boxes. These functions may only be altered using a text editor (e.g. Windows Notepad).

This chapter discusses the following:

- Using Data Insertion Tokens
- Field Help Table File Structure
- Direct Function Access File
- User Defined Manuals
- Downloading and Uploading Files

Data Insertion Tokens

Data insertion tokens are used to extract information from various parts of the LINXX-2010 system and insert them into a form or message. The token is always preceded by the Data Insertion Character \ (backslash). The list below shows the Data Insertion Tokens and the information they insert.

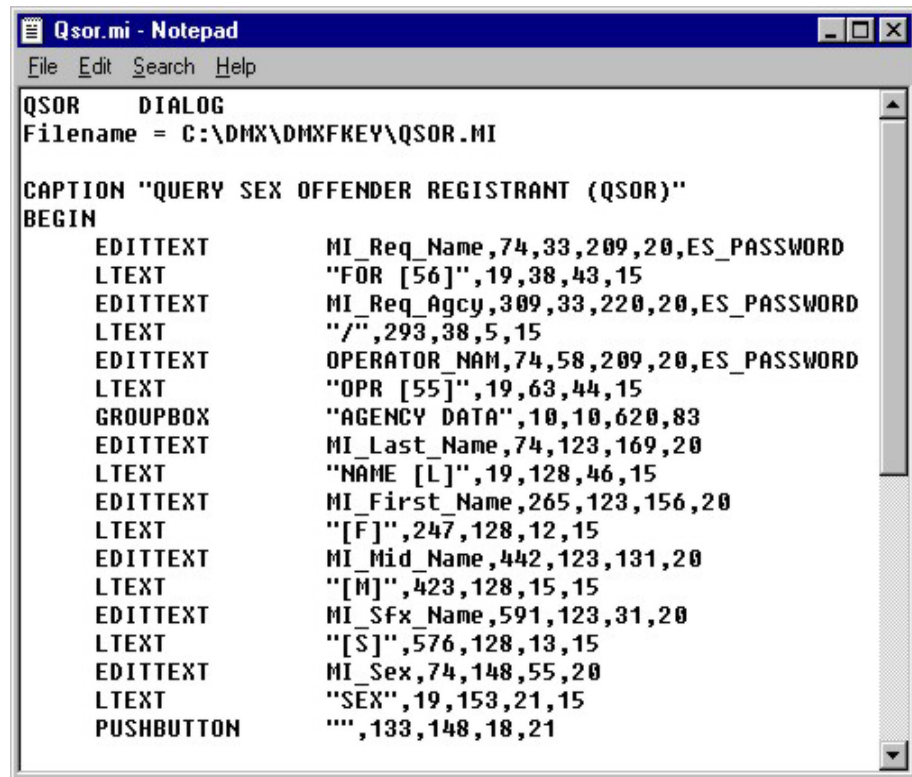
Command Letter	Inserts
O	Operator Name
T	Time as HH:MM
R	Time as HHMM
Z	Time Zone
D	Date as MM-DD-YYYY
C	Date as MMDDYYYY
G	Date as MM/DD/YYYY
A	Agency ORI Code
N	Terminal Network Name (Mnemonic)
M	Current Message Sequence Number
Y	Last 2 Digits of Current Year
H	Current Month as Number
W	Current Day of the Month as Number
Un	User-defined String "n", where "n" is the String Identification Character

Tokens in a Form File

The field automatically fills with the corresponding data item, however, the user **can edit** the data within the field.

How to use data insertion tokens in the field of a DMXFKEY form file:

1. Access the DMXFKEY directory and open the file you want to edit. As an example, open the QSOR.MI file (Query Sex Offender Registration - Michigan) as shown in Figure 5.1.



```

QSOR    DIALOG
Filename = C:\DMX\DMXFKEY\QSOR.MI

CAPTION "QUERY SEX OFFENDER REGISTRANT (QSOR)"
BEGIN
    EDITTEXT      MI_Req_Name,74,33,209,20,ES_PASSWORD
    LTEXT         "FOR [56]",19,38,43,15
    EDITTEXT      MI_Req_Agcy,309,33,220,20,ES_PASSWORD
    LTEXT         "/",293,38,5,15
    EDITTEXT      OPERATOR_NAME,74,58,209,20,ES_PASSWORD
    LTEXT         "OPR [55]",19,63,44,15
    GROUPBOX      "AGENCY DATA",10,10,620,83
    EDITTEXT      MI_Last_Name,74,123,169,20
    LTEXT         "NAME [L]",19,128,46,15
    EDITTEXT      MI_First_Name,265,123,156,20
    LTEXT         "[F]",247,128,12,15
    EDITTEXT      MI_Mid_Name,442,123,131,20
    LTEXT         "[M]",423,128,15,15
    EDITTEXT      MI_Sfx_Name,591,123,31,20
    LTEXT         "[S]",576,128,13,15
    EDITTEXT      MI_Sex,74,148,55,20
    LTEXT         "SEX",19,153,21,15
    PUSHBUTTON    "",133,148,18,21
  
```

Figure 5.1 Example of QSOR.MI File

2. The “preload” must be on the line following the EDIT TEXT line for the desired field. Referencing Figure 5-1, the \O token is inserted in the “For [56]” field of the transaction (the first field). This automatically inserts the operator name into the **For** field when the transaction form is opened.
3. Type PRELOAD, “fieldname” <space> “\the token”. The line in the example will have the following format:

```
PRELOAD, "FOR [56]" "\O"
```

4. Save the file.

Tokens in a Transaction File

The data corresponding to the token is inserted into the message, however, the user **cannot edit** the data within the field.

How to use data insertion tokens in a transaction definition:

1. Access the TRANSDEF directory and open the .DEF form file you wish to edit.
2. Type @INSERT “\token” on a new line immediately after the @FIELD line for the field where the token will be inserted.
3. Save the file.

Tokens in Free Text

Data insertion tokens **cannot** be manually typed in a free text message.

Free Text Messages

To insert a data insertion token in a free text message:

1. Type the free text message up to the point where the insertion token is placed.
2. With the cursor at the point where you would usually type the data insertion token, click **Options** on the menu bar, then click **Insert Data String**.
3. The **Insert Data String** dialog box is displayed with the names of strings to select from in a list. A list of data strings is shown below in Figure 5.2.

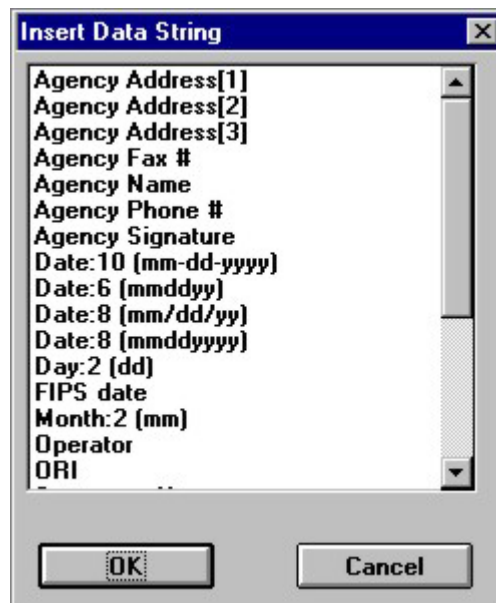


Figure 5.2 Insert Data String

4. Click the desired string, then click **OK** or click **Cancel** to quit the process.
5. Complete the free text message and transmit.

Form Fields

To insert a data insertion token in a form:

1. Select a transaction from the **Forms** menu option.
2. Tab to or click in the desired field.
3. With the cursor in the desired field, click **Options** on the menu bar, then click **Insert Data String**.
4. The **Insert Data String** dialog box is displayed with the names of strings to select from in a list (reference Figure 5.2).
5. Click the desired string, then click **OK** or click **Cancel** to quit the process.
6. Complete the form and transmit.

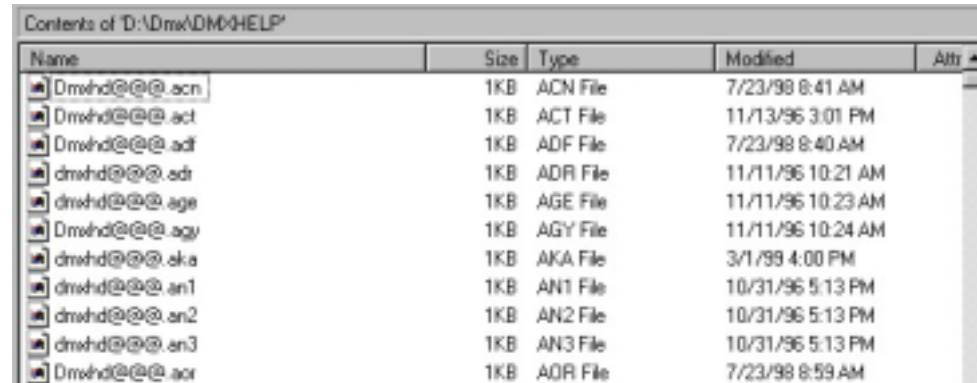
Insertion Token	Inserts
O	operator name
T	time as HH:MM
R	time as HHMM
Z	time zone
D	date as MM-DD-YYYY
C	date as MMDDYYYY
G	date as MM/DD/YYYY
A	agency ORI code
N	terminal network name (mnemonic)
M	current message sequence number
Y	last two digits of current year
H	current month as number
W	current day of the month as number
Un	user defined string "n", where "n" represents the string identification character

The data insertion tokens can be used in any formatted screen where the information that needs to be entered into the fields already resides within the LINXX-2010 system. For example, the \A is used when a formatted screen requires the user to type in the agency ORI. By inserting the \A token into the **ORI** field while building the format, LINXX-2010 automatically inserts the agency ORI that was set in the **Interface Options** dialog box in the **User Interface Setup** program. The agency ORI is inserted into the **ORI** field each time the user recalls a form that contains the this field. If a different ORI must be entered, the user may type over the inserted data.

All data insertion tokens may be used in the same manner. As long as the data to be inserted resides in the LINXX-2010 system, these tokens can be used inside and outside of defined data fields.

Help Table Files

This section discusses the editing and structure of the LINXX-2010 Help lookup table files. Lookup table files retain raw data. All Help definition files and lookup table files are ASCII text files stored in the DMX\DMXHELP subdirectory.



Name	Size	Type	Modified	Attr
Dmxhd@@@.acn	1KB	ACN File	7/23/98 8:41 AM	
Dmxhd@@@.act	1KB	ACT File	11/13/96 3:01 PM	
Dmxhd@@@.adf	1KB	ADF File	7/23/98 8:40 AM	
Dmxhd@@@.adr	1KB	ADR File	11/11/96 10:21 AM	
Dmxhd@@@.age	1KB	AGE File	11/11/96 10:23 AM	
Dmxhd@@@.agy	1KB	AGY File	11/11/96 10:24 AM	
Dmxhd@@@.aka	1KB	AKA File	3/1/99 4:00 PM	
Dmxhd@@@.an1	1KB	AN1 File	10/31/96 5:13 PM	
Dmxhd@@@.an2	1KB	AN2 File	10/31/96 5:13 PM	
Dmxhd@@@.an3	1KB	AN3 File	10/31/96 5:13 PM	
Dmxhd@@@.acr	1KB	ADR File	7/23/98 8:59 AM	

Figure 5.3 Help Definition Files

There are different levels of Help definition files:

Standard: No lookup table involved

Single level: Associated with a table

Multi-level: Associated with a bi-level table, based on a hierarchy

Help definition files contain Help data, Help definition files, and header information, with the exception of a standard Help definition file that has no need for header information. Figure 5.4 shown below illustrates a Help definition file with a multi-level header.

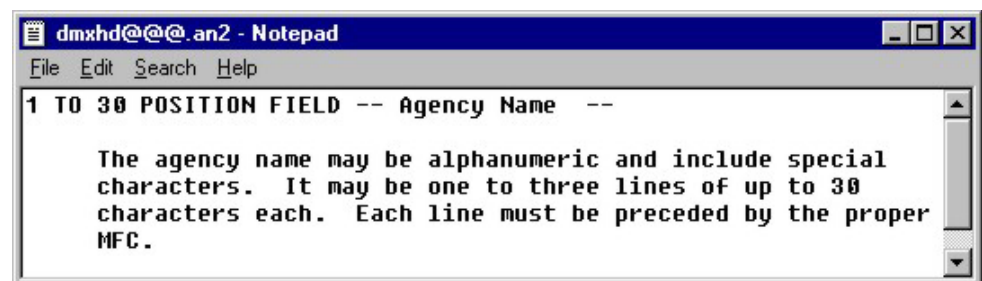


Figure 5.4 Contents of a Help Definition File

Single- and multi-level Help definition files are associated with lookup table files. Look-up table files contain items that are displayed when you click a “lookup” button inside a form. Single-level lookup table files are displayed on one level of items, multi-level lookup files are filtered items based on your selection at the top level.

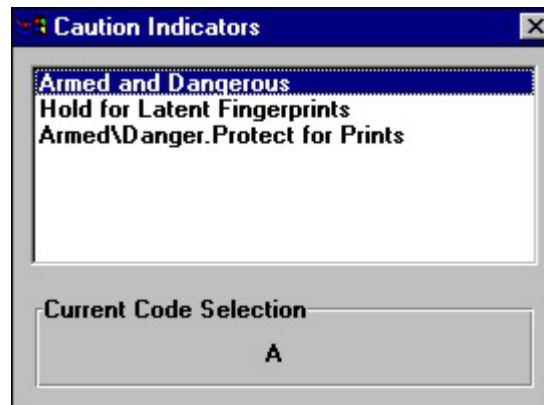


Figure 5.5 Single-level Lookup Table

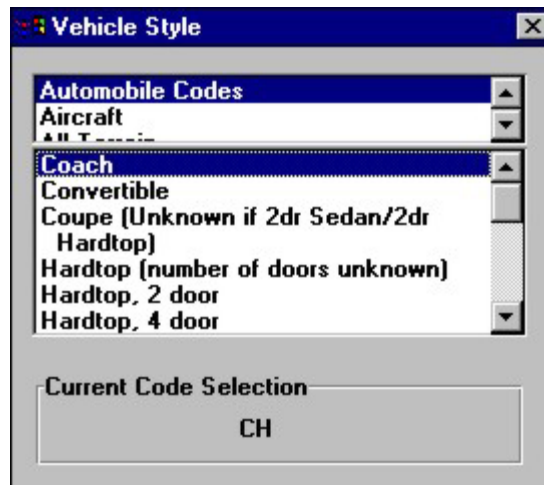


Figure 5.6 Multi-level Lookup Table

Lookup table files contain a list of items associated with a specific Help definition file. The items are listed, usually description first, followed by the item's field code.

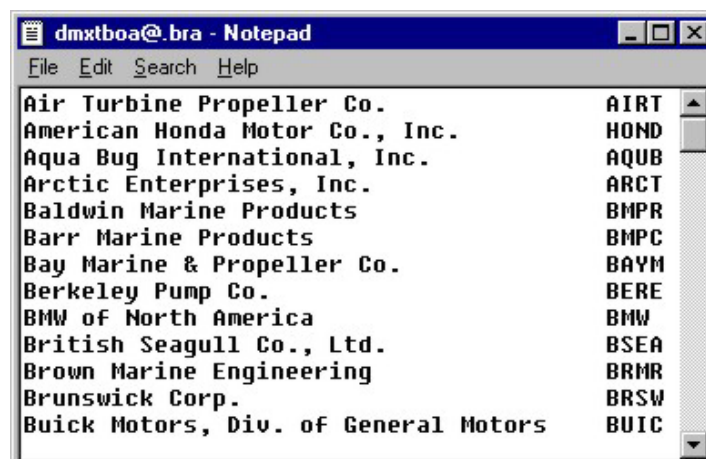


Figure 5.7 Contents of a Help Table File

Naming Conventions

Help definition files begin with DMXHD (**H**elp **D**efinition), followed by attributes which denote whether a form is NCIC or NLETS specific (@ @ @), or if the form is host specific. The standard attributes for a Help file are ??X, where ?? represents the two-character host code followed by the letter X. The extension of the Help file corresponds to the three-digit field code.

For example:

Generic: DMXHD@ @ @.AGE

Host Specific: DMXHDFLX.AGE

For every Help definition file that has an associated lookup table, there is at least one lookup file (see Figure 5.8). The lookup files follow the same naming convention as the field Help files, with the exception of the replacement of **HD** with **T** (Table).

Name	Size	Type	Modified	Attributes
dmxhd@ @ @.ols	1KB	OLS File	3/1/99 4:00 PM	A
dmxt@ @ @ @.ols	25KB	OLS File	5/24/99 2:35 PM	A

Figure 5.8 Help Definition File with Associated Help Table File

Multiple lookup table files may exist for a Help definition file. In Figure 5.9, a Help definition file (DMXHD@ @ @.bma) is followed by lookup table files (DMXT@ @ @a.bma through DMXT@ @ @g.bma). In this example, the lookup file items are listed alphabetically.

Contents of 'D:\Dmx\DMXHELP'				
Name	Size	Type	Modified	Attributes
dmxhd@ @ @.bma	1KB	BMA File	5/8/96 3:06 PM	A
dmxt@ @ @a.bma	8KB	BMA File	2/25/97 4:22 PM	A
dmxt@ @ @b.bma	8KB	BMA File	1/7/99 4:40 PM	A
dmxt@ @ @c.bma	10KB	BMA File	2/25/97 5:43 PM	A
dmxt@ @ @d.bma	5KB	BMA File	2/25/97 4:54 PM	A
dmxt@ @ @e.bma	3KB	BMA File	2/25/97 4:58 PM	A
dmxt@ @ @f.bma	4KB	BMA File	1/7/99 4:40 PM	A
dmxt@ @ @g.bma	4KB	BMA File	2/25/97 5:02 PM	A
dmxt@ @ @h.bma	5KB	BMA File	7/24/96 10:20 PM	A
dmxt@ @ @i.bma	2KB	BMA File	2/25/97 5:03 PM	A

Figure 5.9 Help Table Files Listed Alphabetically

Help File

The Help definition files are ASCII text files saved in the DMX\DMXHELP subdirectory.

The first line of the file defines the maximum number of characters allowed in the field, followed by a short field description. This is followed by a general description of the field and the data it can contain.

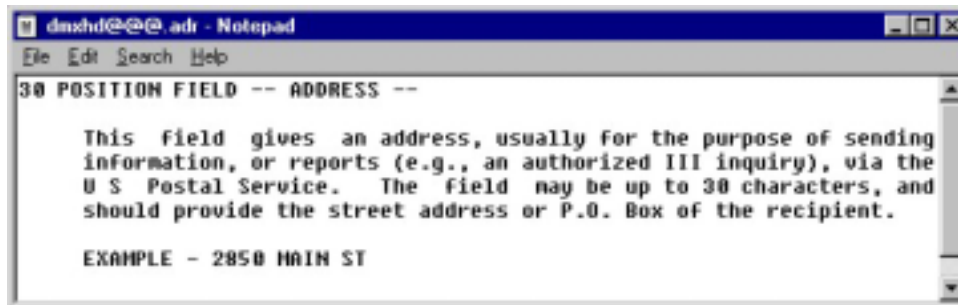


Figure 5.10 Contents of a Help Definition File

Help File with Single-Level Lookup Table

Help definition files that have associated lookup table files contain a header line informing LINXX-2010 that the file is associated with either a single-level or multi-level lookup file.

Name	Size	Type	Modified	Attributes
dmxhd@@@.ols	1KB	OLS File	3/1/99 4:00 PM	A
dmxt@@@.ols	25KB	OLS File	5/24/99 2:35 PM	A

Figure 5.11 Help Definition File With Associated Help Table File

In a single-level association, the header identification is \\S. The next characters in the header inform LINXX-2010 to the number of characters in the field Help code, and at what position within the lookup table file to locate the first character of that field code. These figures are delineated with a back slash (“\”). In Figure 5.12, the field code is one character and begins at position 41 within the lookup table file.



Help File with Multilevel Lookup Table

A multi-level lookup table file has more depth than just a single-level lookup table file, and allows for more detail. In Figure 5.14 below, the “lookup” button beside the **Style** field from an **Enter Stolen Vehicle** form displays the following:



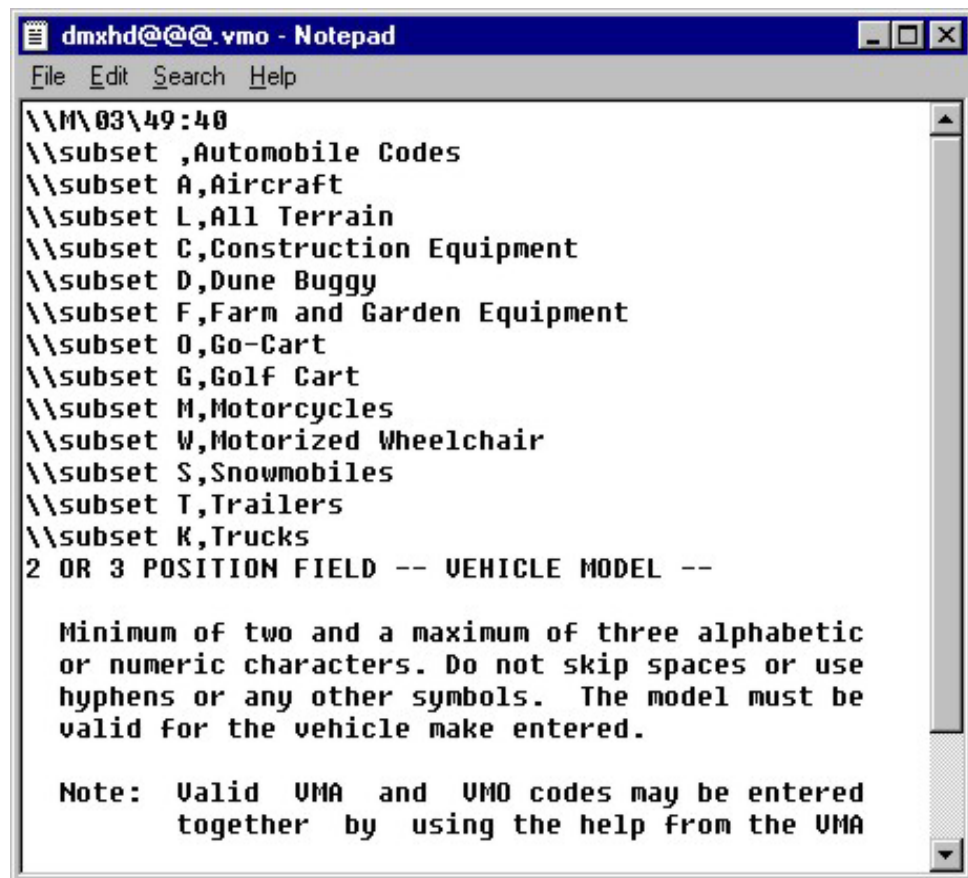
Figure 5.14 Multi-level Lookup Table File

In this example, the top tier item “Aircraft” is highlighted. In the bottom list, only items associated with *Aircraft* from the top tier are displayed (reference Figure 5.14).

These multi-level associated Help definition files, like the single-level associated files, contain a header line informing LINXX-2010 that the file is associated with either a multi-level lookup file or a single-level lookup file. In a multi-level association, this header identification is \\M, followed by the number of characters for the field Help code, and at what position within the lookup table file to locate the first character of that field code. These figures are delineated with a backslash (“\”) and may be followed by a colon (“:”) with the maximum number of characters to be displayed in the lookup Help table list box.

Editing Help Table Files

Figure 5.15 illustrates an example of a Help definition file. This file aids LINXX-2010 in locating the Help table files.

A screenshot of a Notepad window titled 'dmxhd@@@.vmo - Notepad'. The window contains a list of vehicle subsets and a description of the vehicle model field. The text is as follows:

```
\\M\03\49:40
\\subset ,Automobile Codes
\\subset A,Aircraft
\\subset L,All Terrain
\\subset C,Construction Equipment
\\subset D,Dune Buggy
\\subset F,Farm and Garden Equipment
\\subset O,Go-Cart
\\subset G,Golf Cart
\\subset M,Motorcycles
\\subset W,Motorized Wheelchair
\\subset S,Snowmobiles
\\subset T,Trailers
\\subset K,Trucks
2 OR 3 POSITION FIELD -- VEHICLE MODEL --

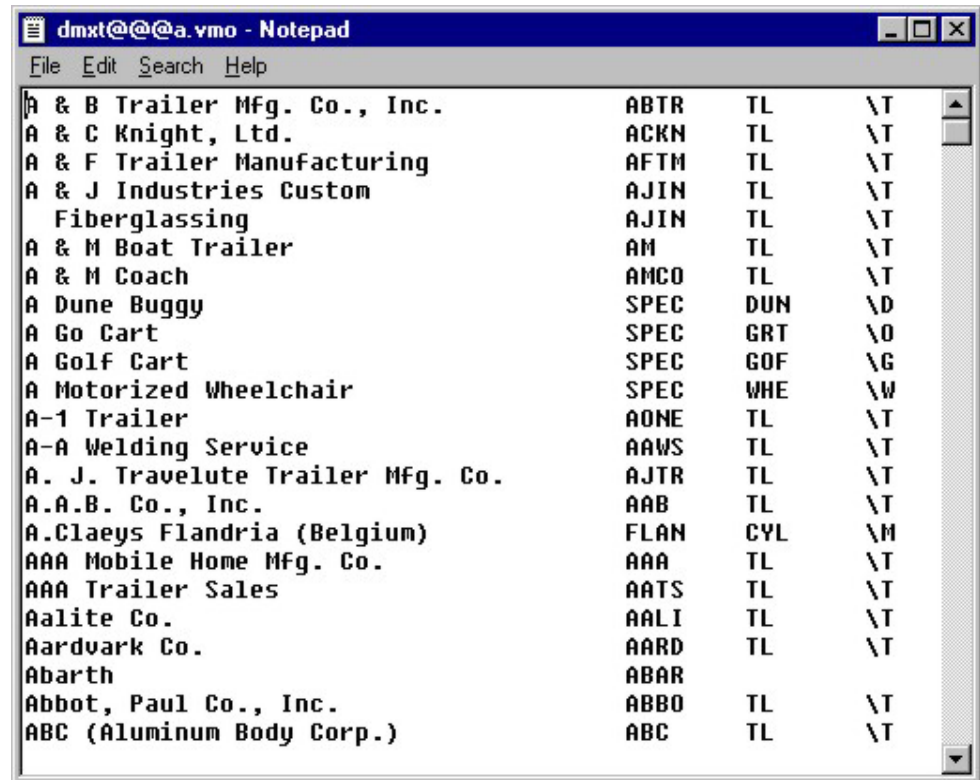
Minimum of two and a maximum of three alphabetic
or numeric characters. Do not skip spaces or use
hyphens or any other symbols. The model must be
valid for the vehicle make entered.

Note: Valid UMA and VMO codes may be entered
together by using the help from the UMA
```

Figure 5.15 Sample VMO Help Definition File

The Help table file may be edited; however, any edits must remain in the existing columns of the Help table file. If the columns are moved to a different position, the column indicator in the header of the Help definition file will no longer apply. LINXX-2010 will not be able to locate the table information.

An example of a VMO Help Table File is shown below in Figure 5.16.



Company Name	Code	Path
A & B Trailer Mfg. Co., Inc.	ABTR	TL \T
A & C Knight, Ltd.	ACKN	TL \T
A & F Trailer Manufacturing	AFTM	TL \T
A & J Industries Custom Fiberglassing	AJIN	TL \T
A & M Boat Trailer	AM	TL \T
A & M Coach	AMCO	TL \T
A Dune Buggy	SPEC	DUN \D
A Go Cart	SPEC	GRT \O
A Golf Cart	SPEC	GOF \G
A Motorized Wheelchair	SPEC	WHE \W
A-1 Trailer	AONE	TL \T
A-A Welding Service	AAWS	TL \T
A. J. Travelute Trailer Mfg. Co.	AJTR	TL \T
A.A.B. Co., Inc.	AAB	TL \T
A.Claeys Flandria (Belgium)	FLAN	CYL \M
AAA Mobile Home Mfg. Co.	AAA	TL \T
AAA Trailer Sales	AATS	TL \T
Aalite Co.	AALI	TL \T
Aardvark Co.	AARD	TL \T
Abarth	ABAR	
Abbot, Paul Co., Inc.	ABBO	TL \T
ABC (Aluminum Body Corp.)	ABC	TL \T

Figure 5.16 Sample VMO Help Table File

Direct Function Access File

This file matches transaction codes to their respective form files in the TRANSDEF directory. When the operator enters the Direct Function Access Identifier and clicks **OK**, this file locates the Direct Access Function code, matches it to the actual form file and accesses that form. (The Direct Function Access Identifier is opened with CTRL+G from the keyboard.) This allows compatibility within systems the users are accustomed to requesting transactions by their codes.

The name of this file is DMXTRANS.NDX. It resides in the DMX directory and consists of entry lines and comment lines. A comment line may begin with any character except A through Z, or 0 through 9. Typically, a comment line begins with the semicolon (;) character.

Entries in the Direct Function Access File have the following format:

mmm,fff.eee

mmm = Up to 32 character length description
fff.eee = form file name and extension

Local Help Files

Local Help files contain user information that is not necessarily system related. For example, an officer duty roster could be maintained, or a list of emergency telephone numbers. The LINXX-2010 system presents the data, it does not process it in any way.

The user accesses the Local Help files via the **Help** menu within LINXX-2010 by clicking the **User Manual** item from the drop-down menu. A list of help selections is displayed (up to 100 subjects). The user may select a topic from the list to view the data. Help topics may change depending on your system setup.

The Local Help files are stored in the DMXHELP subdirectory. Data in these files must contain ASCII characters, Tab characters and Carriage Return/Line Feed characters. All other characters will be ignored. Tab stops are expanded to every eighth position. These files can easily be maintained with a Windows text editor.

To create a User Help:

1. Open a Windows text editor such as Notepad.
2. Type the text (e.g. a duty roster).
3. Use the space bar and then the ENTER key to insert blank lines between entries.

Save the file in the DMX\DMXHELP directory as DMXUHELP.??? The question marks represent what you name the file extension.

Local Help Index File

The Local Help file system has one index file named DMXUHELP.NDX. It contains up to 100 entries of one line each, up to 30 characters in length. These entries list the subject matter. The first line corresponds to the first subject, the second to the next file, and so on up to 100 entries.

Local Help Data File

For each entry in the index file a data file is defined that contains the actual subject matter. Each data file may contain up to 800 lines of data. The files that contain the data are named DMXUHELP.nn, where “nn” is a number ranging from 00 to 99. These files correspond to the line number for that entry in the index file above. For example, if the fifteenth line of the index file contained an entry “Duty Roster”, the actual data for that subject would be contained in the DMXUHELP.14 file.

User Manuals

LINXX-2010 allows you to store and access up to 500 different manuals. Manuals are displayed in a scrollable window providing the user with an easy and efficient method of navigating through the manuals (see Figure 5.17).

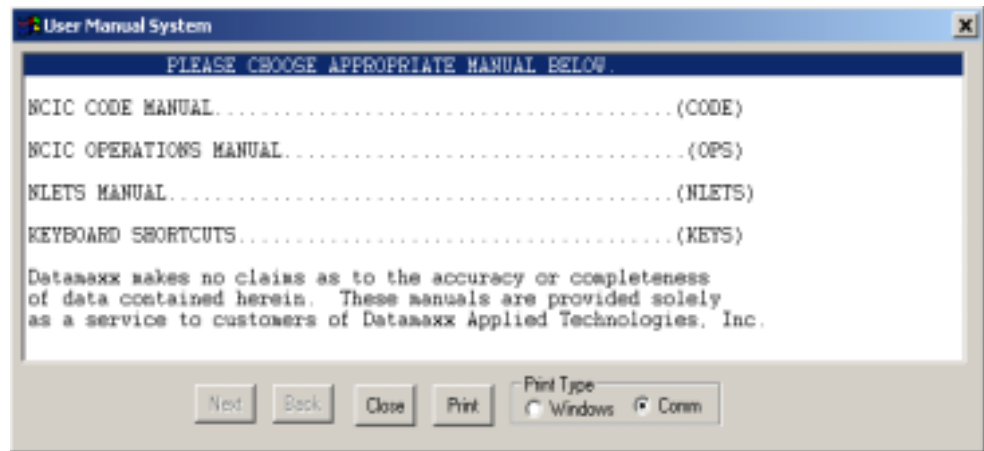


Figure 5.17 User Manual System

Manual Control File

A manual control file named DMXMAN.CTL is placed in the DMXMAN subdirectory. The purpose of this file is to list the available manuals. Each manual resides in its own subdirectory under the DMXMAN subdirectory. Below is a sample DMXMAN.CTL file.

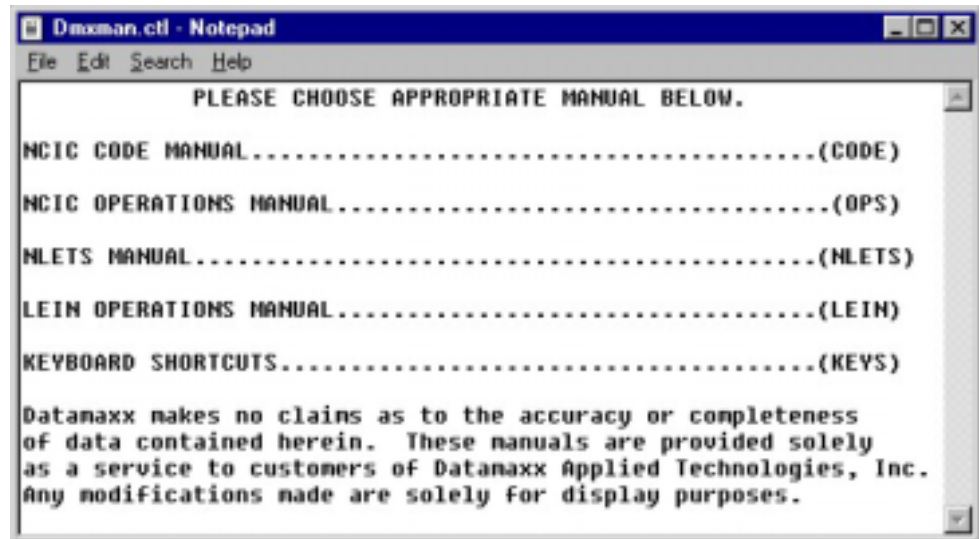


Figure 5.18 Sample DMXMAN.CTL File

The DMXMAN.CTL file has entries with the following format:

```
....text....(manid)
```

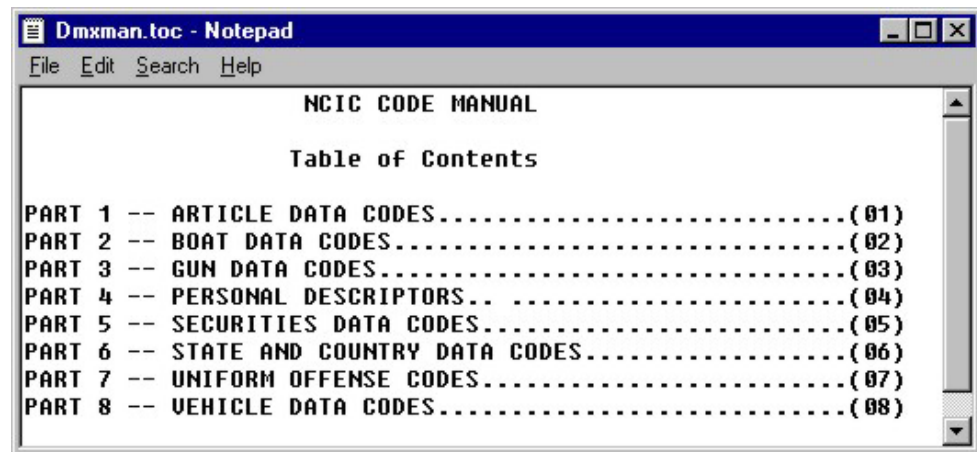
In these entries:

```
....text.....: is the name of the manual.
```

“manid” (manual identification) is the name of the subdirectory in parenthesis. Within the appropriate subdirectory, files exist for the Table of Contents, Chapter Index and the actual manual data. These files are listed and described in the following subsections.

Table of Contents

The Table of Contents file is named DMXMAN.TOC. Below is a sample DMXMAN.TOC file.



```

NCIC CODE MANUAL

Table of Contents

PART 1 -- ARTICLE DATA CODES.....(01)
PART 2 -- BOAT DATA CODES.....(02)
PART 3 -- GUN DATA CODES.....(03)
PART 4 -- PERSONAL DESCRIPTORS.. ..(04)
PART 5 -- SECURITIES DATA CODES.....(05)
PART 6 -- STATE AND COUNTRY DATA CODES.....(06)
PART 7 -- UNIFORM OFFENSE CODES.....(07)
PART 8 -- VEHICLE DATA CODES.....(08)
  
```

Figure 5.19 Sample DMXMAN.TOC File

It has entries as follows:

```
....text.....(chapid)
```

In these entries:

```
....text..... is the chapter title.
```

(chapid) is the two-character identification of the Chapter Index file in parenthesis.

There is only one Table of Contents per manual.

Chapter Index

For each chapter defined in the Table of Contents file there is a Chapter Index file. This file indicates the sections with the reference material that is available.

A Chapter Index file is named DMXMANnnn.SEC. The “nn” field must match a chapter identifier listed in the Table of Contents. Below is a sample DMXMANnnn.SEC file.

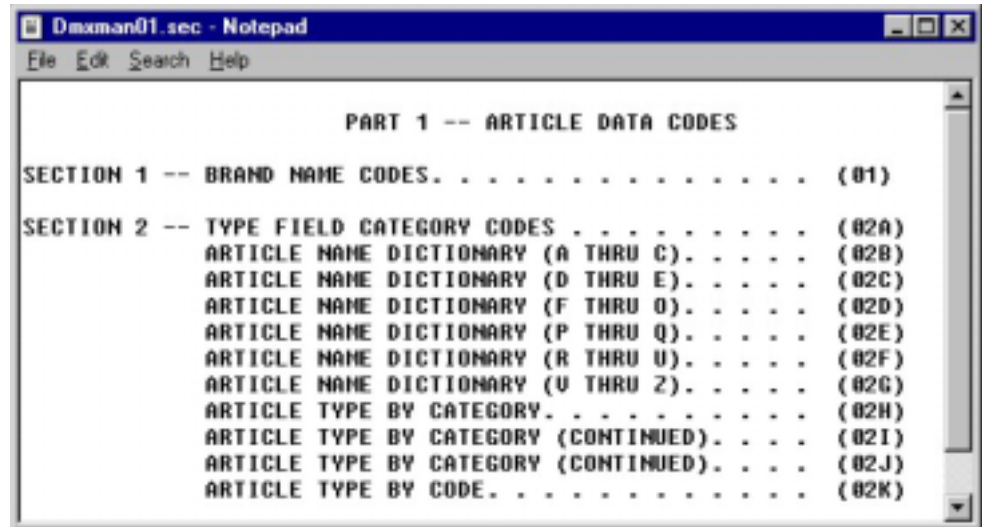


Figure 5.20 Sample DMXMANnnn.SEC File

It has entries as follows:

....text....(secid)

In these entries:

....text.... is the name of the section.

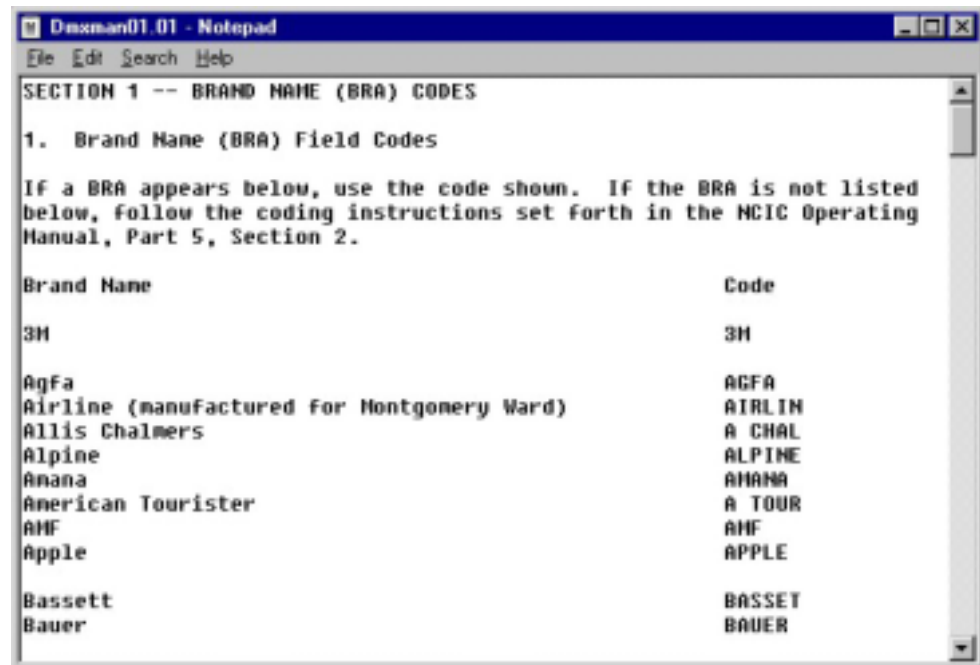
In Figure 5.20, (secid) section identification is the two-character identification of the file containing the actual reference data in parenthesis. There may be any number of Chapter Index files per manual.

Manual Sections

The Manual Section files contain the actual manual contents. Their names are derived from the chapter identification (chapid) and the section identification (secid).

The name of a Manual Section is DMXMANnn.mm where “nnn” is the chapter identification and “mm” is the section identification.

Figure 5.21 illustrates a sample DMXMANnn.mmm file.



```

Dmxman01.01 - Notepad
File Edit Search Help
SECTION 1 -- BRAND NAME (BRA) CODES

1. Brand Name (BRA) Field Codes

IF a BRA appears below, use the code shown. IF the BRA is not listed
below, follow the coding instructions set forth in the NCIC Operating
Manual, Part 5, Section 2.

Brand Name                                Code
3M                                         3M
Agfa                                       AGFA
Airline (manufactured for Montgomery Ward) AIRLIN
Allis Chalmers                            A CHAL
Alpine                                    ALPINE
Anana                                      ANANA
American Tourister                       A TOUR
AMF                                       AMF
Apple                                    APPLE
Bassett                                  BASSET
Bauer                                    BAUER

```

Figure 5.21 Sample DMXMANnn.mmm File

Downloading and Uploading Files

LINXX-2010 provides the ability to transfer ASCII and binary data files across the network in order to update and maintain the system. This section provides information on the file transfer facility provided by LINXX-2010.

“Pushing” Files

LINXX-2010 supports one method of transferring ASCII and binary files known as the “Push” method.

The “Push” method is initiated from a central site and is used to transfer small files from the central site to the local agency workstations. For example, a form you accessed has changed in appearance. Following the procedures described below ensures all clients on the network receive the changes.

The data file being transferred is encapsulated in an Administrative Message (AM).

This is a process of the LINXX-2010 Workstation software, which means that the Communications Task must be active to receive the message. If the receiving workstation is powered down, the message will not queue or print.

Downloading ASCII Files to a Station

This procedure must be performed from a Message Window and can only be used for ASCII files.

First, start with a standard AM message header format.

Next, the header format shown below must be used to notify the receiving workstation that an incoming download is following the AM message.

```
^ZF#nnnnnnnn.nnn
```

Where,

“^” is the escape character. (Use the SHIFT+6 keys to place a ^ on the screen.)

“ZF” are the letters “Z” and “F”.

“#” is either 1 (create new file) or 2 (add to existing file).

“nnnnnnnn.nnn” is the full DOS file name with valid path on the receiving workstation. For example, D:\DMX\DMXFKEY\nnnnnnnn.nnn.

Select the **File** menu from the LINXX-2010 menu bar, click **Import text from file** and select the file you want to “push” to the workstation. Once selected, this file will be placed into the Message Window.

The data file must be followed by a trailer:

```
^ZF
```

Where,

^ is the escape character. (Use the SHIFT + 6 keys to place the ^ character on a new line.)

“ZF” are the letters “Z” and “F”.

The size of the data file is dependent on the Host Transmit Size.

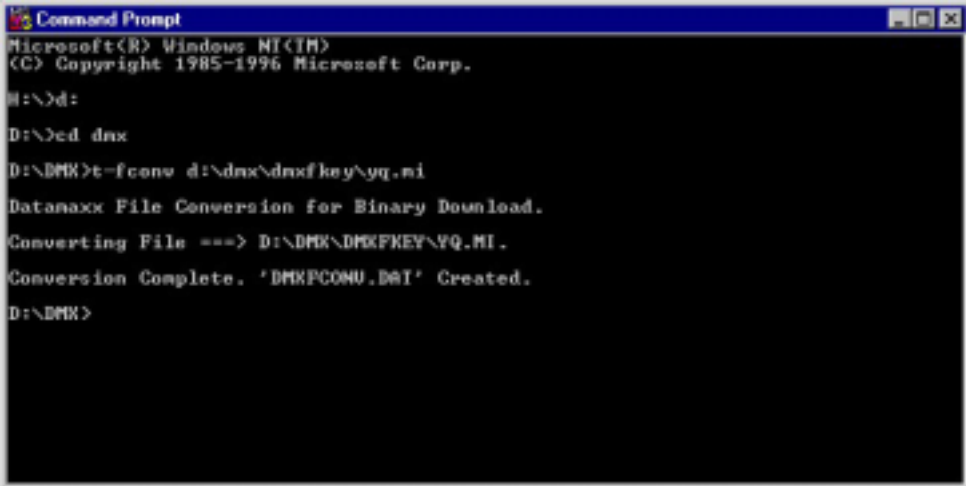
Downloading Binary Files to a Station

Downloading binary files to a remote workstation requires a two-stage process.

The first stage prepares the file for transfer by converting it to a format the host computer can accept.

The second stage performs the actual transfer. As in the case of the ASCII file, the transfer takes place by use of a simple administrative message with embedded commands in the text of the message.

To prepare the file for transfer, initiate a command prompt and change directories to C:\DMX (or the directory where you wish the data file to be placed) and enter the following: T-FCNV *filename*, where *filename* is the full path and filename of the file to prepare for transfer. For example, type T-FCNV D:\DMX\DMXFKEY\YQ.MI to convert the YQ.MI form into binary format. The original file will not be overwritten.



```
Command Prompt
Microsoft(R) Windows NT(TM)
(C) Copyright 1985-1996 Microsoft Corp.
H:\>d:
D:\>cd dmx
D:\DMX>t-fcnv d:\dmx\dmxfkey\yq.mi
Datamaxx File Conversion for Binary Download.
Converting File ==> D:\DMX\DMXFKEY\YQ.MI.
Conversion Complete. 'DMXFCONV.DAT' Created.
D:\DMX>
```

Figure 5.22 Command Prompt

This procedure creates an output file in the DMX directory named DMXFCONV.DAT.

Open a Message Window and clear the screen, then type in the standard AM message header format.

Type the ^ haracter. Again, SHIFT+6 will place the ^ on the new line.

Follow that with the ZF header, then either the letter “A” (create a new file) or the letter “B” (add to an existing file). The “A” designator will also overwrite the old file, if it exists.

Press ENTER to forward to a new line.

Select **File** from the LINXX-2010 menu bar and click **Import text from file**, then select the file you wish to “push” to the workstation. In the case of the binary transfer, the file name is named DMXFCONV.DAT. Once selected, this file is placed into the Message Window. Press the ENTER key to forward to a new line.

Place the Escape character at this point followed by the letters ZF. For example, ^ZF. Once this step is complete, transmit the message.

Virtual Directories

In the steps previously outlined, a full path was used in both the ASCII and Binary transfer procedures. To further facilitate the transfer process, “virtual directories”, drive designators of “0” through “9” may be used to define the full path and drive letter. The receiving workstation will place the file in the drive and directory corresponding to the assigned designator. The virtual directory designators are as listed below.

0:	DMX directory
1:	DMXFKEY sub-directory
2:	DMXHELP sub-directory
3:	DMXTEDIT sub-directory
4:	TRANSDEF sub-directory
5:	DMXMAN sub-directory
6:	DMXTRD sub-directory
7:	USERFILE sub-directory
8:	DMXFIELD sub-directory
9:	(reserved for future use)

To place the file in the DMX\DMXFKEY directory using the ASCII transfer steps described above, the DOS path and file name must have the following format:

1:YQ.NLT

For example, F11:YQ.NLT.

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6 SYSTEM MAINTENANCE

Chapter 6 describes the maintenance procedures for LINXX-2010. Some of these functions are not provided within the LINXX-2010 program interface, nor are they contained within any of the LINXX-2010 configuration dialogs. These functions may only be altered using a Windows text editor (e.g. Notepad).

This chapter discusses the following topics:

- Message Log Processing
- Updating tables
- Using the T-UPD program

Message Logs

LINXX-2010 automatically logs all messages to the hard disk. The logging process continues even if the user is working in another program; for example, word processing.

The message log may be printed on an attached DOS or Windows printer (other than the network printer). This is useful during audits of user activities.

Backing Up Message Logs

The message logs must be copied and reset at regular intervals to prohibit message log files from filling up. You will not be able to perform transactions once the log files reach full capacity.

To backup message logs to a floppy disk:

1. In LINXX-2010, click the **Log** menu item.
2. Click **Backup** from the menu as shown in Figure 6.1.

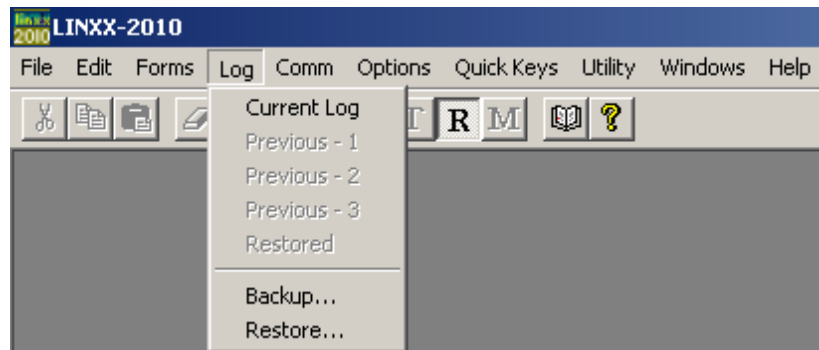


Figure 6.1 Log Menu - Backup

3. Insert a formatted floppy disk in the chosen drive.

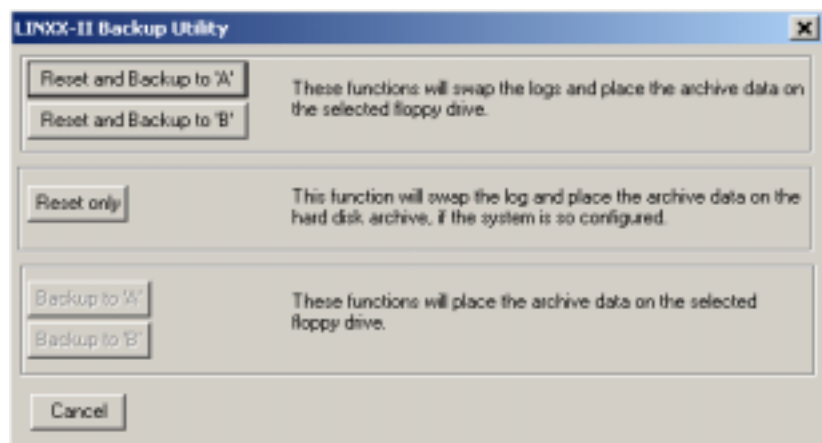


Figure 6.2 Backup Utility

4. Select the desired option by clicking the respective button.
5. Follow the instructions on the screen. If prompted, insert a second diskette.

The backup procedure copies only the current message log onto the floppy disk. The Reset function shuffles the logs down by one log. For a more detailed explanation of this function, refer to the LINXX-2010 User's Guide.

Restoring Message Logs

You may restore message logs that have been backed up on diskettes.

To restore a log file from a diskette:

1. Insert the floppy disk into your floppy drive.
2. In LINXX-2010, click the **Log** menu item (see Figure 6.3).

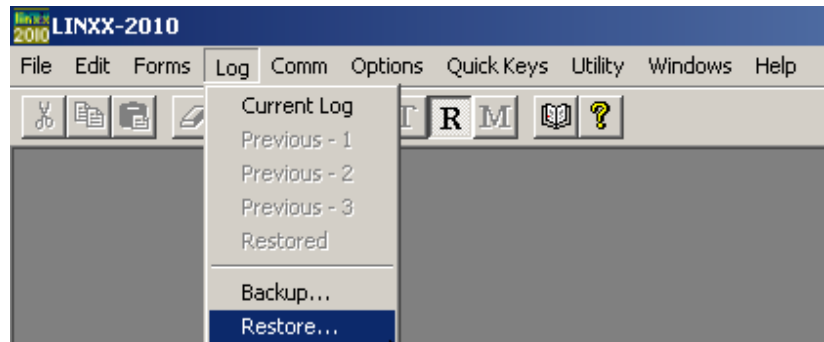


Figure 6.3 Log Menu - Restore

3. Click **Restore** from the drop-down menu.

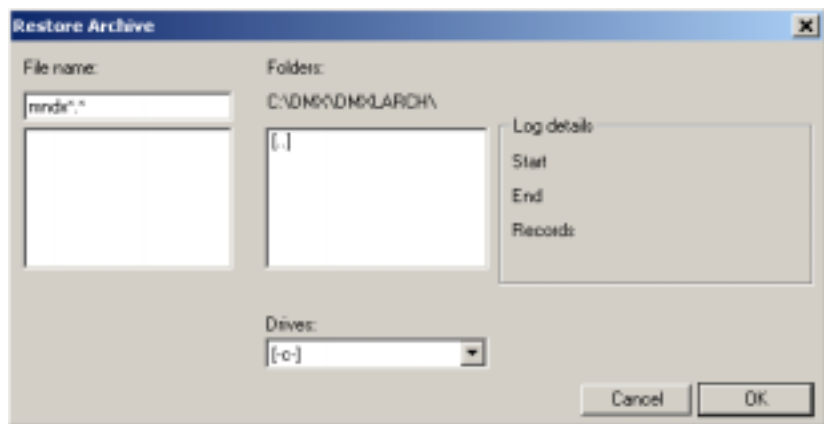


Figure 6.4 Restore Archive

4. Select the drive from the list box that contains the message log you want to restore.
5. In the **Folders** list box (above the **Drives** box) select the file by double-clicking the name.
6. Click the **OK** button.

The message log is restored to the DMX directory. In the LINXX-2010 user interface, click **Log | Restored** to see the message log you restored from the disk.

Update Help Tables

The user defined (local) Help files are sequential files with a simple ASCII format that may be updated as needed. Since these files are normal DOS/WINDOWS ASCII files, they can be manipulated with normal DOS/WINDOWS programs, or modified with the LINXX-2010 utility program T-UPD.

There are two types of Help files in LINXX-2010: the system and local Help files that are informational files you create, and system help files used for field editing and information.

For more detail on Help files, refer to Chapter 5 - *Programming LINXX-2010*.

System Table Maintenance

LINXX-2010 field Help provides instructions and code tables for field codes defined by the NCIC code manual. For example, there is a code table for the VMA field code. This table lists the vehicle makes and models and the NCIC code manual and the MFC (message field codes).

Since tables can be large and cumbersome to work with, the T-UPD program allows the user to make changes to these tables by downloading the changes.

The T-UPD program allows you to add table entries, delete table entries, and modify existing entries.

Considerations for Large Tables

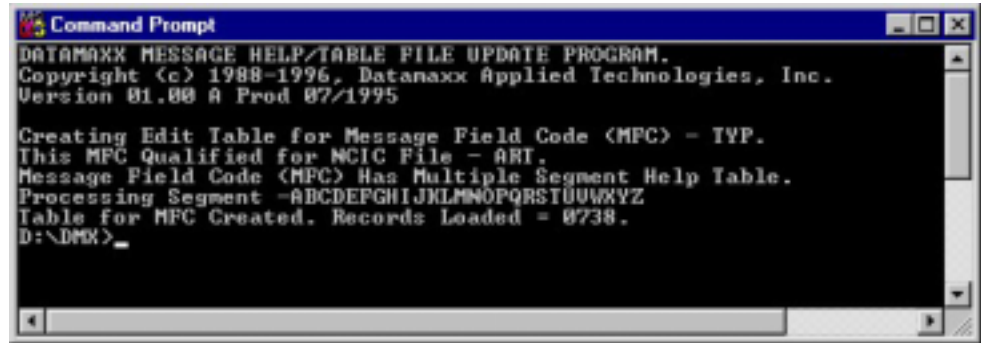
Some of the table files exceed 800 entries. In order to provide good performance when searching these tables on-line, the entries are extracted and stored in a special table file. These tables are known as “compiled edit tables” and are stored in the DMXTEDIT subdirectory. A procedure to update these files from the table files named UPDTBLS is provided for the user. This procedure will automatically analyze all large table files and create the compiled files.

To invoke this procedure enter the following command:

From the DMX directory DOS prompt type:

UPDTBLS

If the procedure UPDCODES was used to update the tables, this procedure will be invoked automatically if a change to one of the large tables is detected. Below is an example of the command prompt after UPDTBLS has run.

A screenshot of a DOS Command Prompt window titled "Command Prompt". The text displayed is as follows:
DATAMAXX MESSAGE HELP/TABLE FILE UPDATE PROGRAM.
Copyright (c) 1988-1996, Datanaxx Applied Technologies, Inc.
Version 01.00 A Prod 07/1995

Creating Edit Table for Message Field Code (MFC) - IYP.
This MFC Qualified for NCIC File - ART.
Message Field Code (MFC) Has Multiple Segment Help Table.
Processing Segment -ABCDEFGHIJKLMNPOQRSTUVWXYZ
Table for MFC Created. Records Loaded = 0738.
D:\DMX>

Figure 6.5 UPDTBLS Complete

Using the T-UPD Program

In order to run a series of updates against the table files on the LINXX-2010 system, enter the T-UPD command at the DOS prompt as follows:

T-UPD /I=nnn

In this command, replace the “nnn” with the DOS file extension from the desired file that contains the input commands. The input file resides in the DMX directory and has the name DMXTUPD.nnn, where “nnn” is the extension. This allows multiple update input files to be created.

The DMXTUPD.nnn file is downloaded from another workstation via the host computer, using the <ESC>ZF file transfer sequence. For example, if an update file named DMXTUPD.ABC was used as the input to the T-UPD program, the command to run the program would appear as follows:

T-UPD /I=ABC

This command may also be placed in a DOS batch procedure (BAT file). The system will display a message screen, perform the necessary functions, and inform the user as to the actions that have taken place.

In order to assist the administrator with the update procedure, a DOS BAT file named UPDCODES is provided. This procedure will automatically invoke the T-UPD program. To run this program enter the following command:

UPDCODES nnn

In this command, “nnn” is replaced with the identification of the file that contains the update parameters, as described above. For example, if the file DMXTUPD.ABC was used to contain the updates, the following command would be used to invoke the updates:

UPDCODES ABC

There is a significant advantage to using this procedure as it will also update the necessary compiled edit tables, as described in the subsection below.

File Format

The input file contains commands to identify the MFC (message field code) for the table to be updated, followed by the updates for that table. In the case where an MFC has multiple formats depending on the NCIC file being accessed, a qualifier may be given.

The input file must have standard ASCII seven-bit data, with a CR/LF at the end of each line.

The command to identify the MFC to update starts in column 1, and appears as follows:

/M=aaa, where “aaa” is the MFC to update.

If the MFC is not unique, but needs to be identified by a file name, follow the /M=aaa with a file qualifier as shown in the format below.

/F=bbb , where “bbb” is the NCIC file ID.

For example, to create an update for Gun Makes (Gun Makes are a unique code) use the following:

/M=MAK

To create an update for Gun Types use the following:

/M=TYP,/F=GUN

After the MFC (and optionally, the file) has been identified, the next records are treated as updates to the table, until the next occurrence of /M= beginning in column 1, or the end of data. At that point, the run will terminate and the new MFC is updated.

To add a record, simply give the new code and the description of the record. It will be added in the correct sorted location. It is not necessary to have inputs in order.

To replace a record give a new code, but with the same description as an existing code in the table.

To delete a record, place four (4) asterisks (****) starting in the first column, followed by the code to be deleted. Note that all occurrences of the code will be searched and deleted from the table. To accommodate deletion of codes that have embedded spaces, the asterisk (*) character should be used within such codes to indicate the embedded spaces.

For example, to add two new Gun Make codes use the following input records:

/M=MAK

New Gun 1	NGN
-----------	-----

Saturday Night Special	SNS
------------------------	-----

To delete the PS code from the Gun Type table, use the following inputs.

/M=TYP,/F=GUN

****PS

Note that the added table codes must be located as close to the code column as possible. To determine the distance in eight (8) space tabs, access the field help code table and estimate the number of spaces.

Some large tables have up to 26 files containing codes; these are referred to as table segments. The T-UPD program finds the correct table segment and updates it. For reasons of performance it is recommended that all updates for a specific MFC be grouped by the first letters of their descriptions.

A code delete searches each segment to ensure that all matching entries are deleted.

There may be cases in which it is necessary to delete one particular line item, without searching for all occurrences of that code. In this case the locator (consisting of the four asterisks (****) followed by the code) should be followed by the exact description as it appears in the Help table.

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APPENDIX A - SYSTEM DIRECTORIES

Appendix A lists the LINXX-2010 working directories. LINXX-2010 requires many files for its operation. These files fall into several logical categories. LINXX-2010 uses the operating systems's directory and file structure to create an easily understood structure.

All files related to LINXX-2010 reside in either the DMX directory or one of its subdirectories.

DMX directory files

The DMX directory itself holds many files, and serves as a focal point for all other subdirectories involved with the system. This directory contains all LINXX-2010 executable programs, the message log files, all support DOS BAT files, and user-defined files such as the edit index, user edit tables, and the local Help data.

DMXFKEY subdirectory

This subdirectory contains all form definitions.

DMXHELP subdirectory

This subdirectory contains all the Help files and associated Help tables. The installation procedure will install the appropriate files automatically. User defined field Help and table files (as distinct from the local Help files) must be placed in this subdirectory.

DMXTEDIT subdirectory

This subdirectory contains the compiled lookup tables that are used for validating data entered into fields when the number of valid choices for a field exceeds 800.

DMXGQUE/DMXCQUE subdirectory

This subdirectory contains message log queues, printer queues, data files and LU status when operating in a LAN (local area network) environment. In a single-user environment, this subdirectory is DMXCQUE.

DMXMAN subdirectory

This subdirectory contains the files for the on-line user manuals.

DMXLARCH subdirectory

This subdirectory contains message log files that have been archived to the hard disk via the automatic archive feature.

MACRO subdirectory

This subdirectory provides storage for macros.

DMXFIELD subdiectory

This subdirectory contains the files defining the fields in transaction forms.

TRANSDEF subdirectory

This subdirectory contains the files defining the individual transaction forms.

Backup subdirectory

This subdirectory contains any files backed up during subsequent installations or updates of the LINXX-2010 software.

DMXIMAGE subdirectory

This subdirectory may be used to store image files.

Windrvr subdirectory

This subdirectory contains a file named INSTDRV.EXE used for Windows NT systems to install necessary drivers for the 8530 interface card.

APPENDIX B - CONFIGURATION FILES

The following is a list of the configuration files for your convenience. Directories are in normal type face, actual file names are in bold type face.

DMXENV.INI

This file most often contains settings (defaults). An example of the contents of this file is shown below:

```
[settings]
dmxdu=C ; datamaxx data unit drive letter (one letter)
dmxlu=00 ; datamaxx lan unit id (two letters/digits)
dmxcq=C
LookupDelay = 0.75; field lookup table inter-character delay for lookup
(in seconds)
; when searching the list by entering "F" "E" "R" "A" "R" "T", how long to
wait before starting a new search
; if the user waited more than 0.75 of a second between "A" and "R", the
vehicle make list would jump to "Rich Industries"
[Forms]
Fix Edit Borders = No; remove border style from fields
```

DMXTRNLG.NDX

The transaction dissemination logging control file. Controls *which* messages are logged.

DMXALOG.???

Dissemination log files.

DMXCKPSY.DAT

Message number tracking file. Delete this file to reset the message number to 0 (zero).

DMXDSK??.DAT

LINXX-2010 desktop file used for tracking the windows and forms opened last time LINXX-2010 was run so that LINXX-2010 can restore them. (The ?? is the DMXLU for the workstation.)

DMXTRANS.NDX

This file defines the mnemonics (codes) that LINXX-2010 uses for direct form access.

LINXX.MNU

The LINXX-2010 forms menu definition.

DMXMLOG.DAT, DMXMLOG.NDX

The current message log data and index files.

DMXMLOG.D-?, DMXMLOG.I-?

The first, second, and third most recent and restored message logs, where ? is the log number (1, 2, 3, and 4 is the restored log).

DMXCFG.SEC

The security configuration file.

QUICK.CFG

The file in which Quick Key definitions are stored.

CONFIG.INI

Contains agency and licensing information.

DMXTAUTH.CTL

The transaction authorization control file. Defines what user groups are authorized for which transactions.

MESSAGE?.Ddd

Files used to store the text of message windows. (? is 0-3 for the message windows number; dd is the DMXLU.)

DMXCFGdd.WKS

The user interface configuration file, where dd is the LAN unit number (DMXLU).

DMXHELP

DMXUHELP.NDX, DMXUHELP.??

User help index file. Each line describes the contents of a user help file (DMXUHELP.??, where ?? is 00 to 99). Each user Help file is an ASCII text file.

MACRO

MACRO.MNU

The file that LINXX-2010 uses to remember which macros are defined, and what files define them.

DMXCFG.DCM

This is the CommTask Setup configuration file.

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